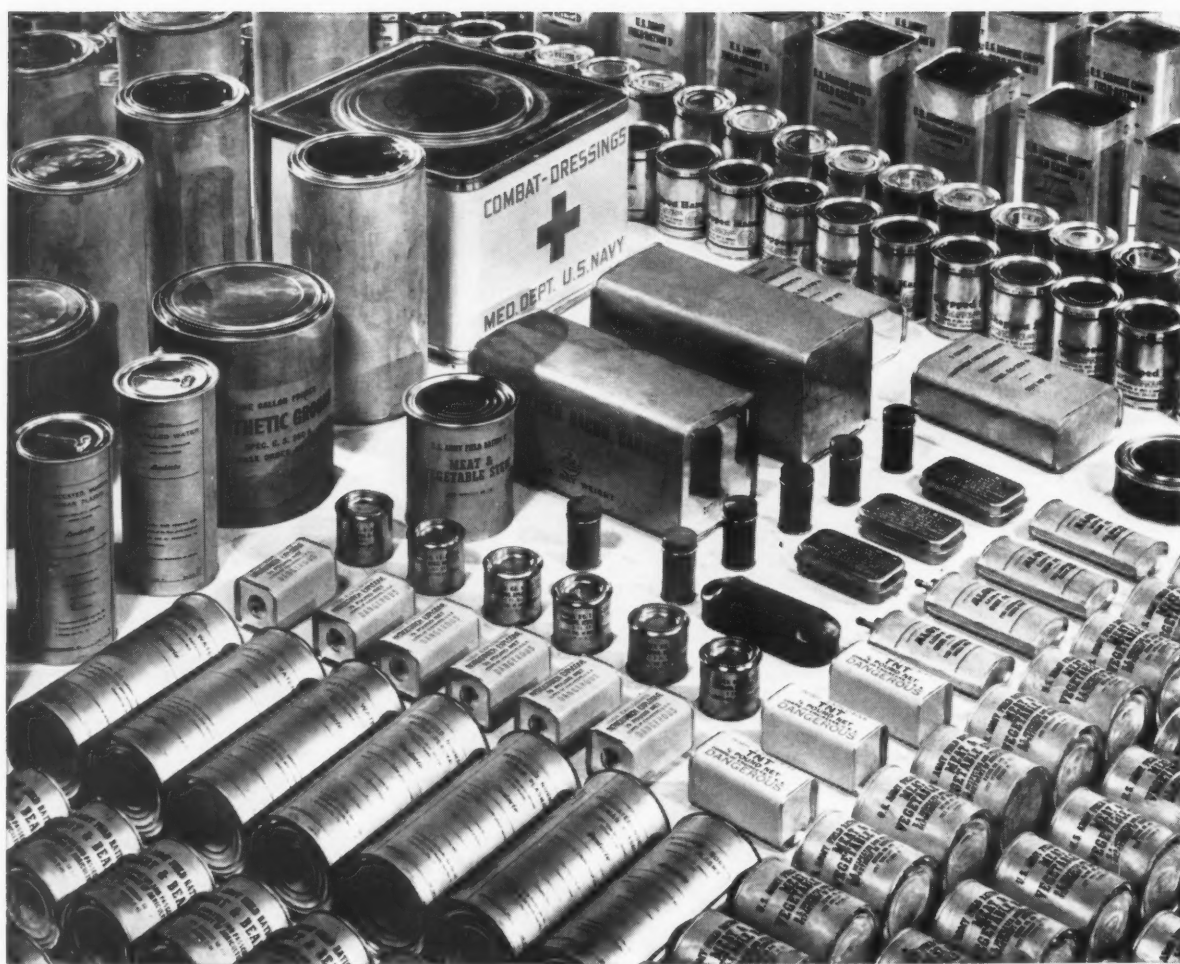


MODERN PACKAGING



MARCH · 1942



SOME "NON-SECRET" WEAPONS

THE AXIS WOULD LIKE TO HAVE

Study the Labels on the cans and packages in the picture above.

On some of them, you'll notice "Army Sliced Bacon, Canned . . . U. S. Marine Corps Field Ration D . . . U. S. Army Meat and Vegetable Hash . . . TNT Dangerous, Corps of Engineers."

There's a container for dried human blood in the picture, too. For transfusions in the field. Another to house a delicate motor on anti-aircraft guns.

And while you'll be interested to

know that these articles are some of the many defense items the containers for which are made by the can-making and packaging industries, their significance goes far beyond this simple fact.

For they are weapons. "Non-secret" weapons, if you will. And every country has them. *But the Axis would like to have ours.* Do you realize why?

The industrial resources that produced these "non-secret" weapons are the largest in the world. The Axis needs those resources.

It needs the men . . . the machinery . . . the skill . . . the research that make the quality and the quantity of these weapons possible. It needs the energy of the free, unregimented economy which produced these weapons.

We Americans can congratulate ourselves that the Axis hasn't these resources . . . that we—not the Axis—have built the greatest packaging and can-making industries in the world . . . that we are now using the sinews of these industries to resist aggression. American Can Company, 230 Park Avenue, New York, N. Y.



BUSINESS IS BASED ON PERCENTAGES. In this manner it records its ups and downs, its income and outgo, its profits and losses. In the present Emergency, many of its most trying problems involve percentages. Manufacturers of certain products may obtain only a percentage of their requirements in raw materials and packages. Suppliers are in a like predicament. Unfortunately, this percentage may decrease before it increases.

But restrictions on containers and wrapping materials will not alone solve the many packaging problems. All users of packages must conserve materials. Not necessarily by reducing the production of their products, but through a reduction in package units, sizes and styles. In short, by simplification and standardization.

Glass package suppliers, cooperating with the government and various trade associations, are engaged even now in a package simplification and standardization program. All packagers of the products of commerce will be asked to participate in this program to the limit of their ability . . . for the good of their country, their industry and the public they serve.

The main benefit to be gained from this program is

the conservation of vital materials. But there are other advantages which will accrue to all concerned. The consumer will be able to buy more economically. There will be less confusion over the capacities of odd-shaped packages. Containers may be more easily handled.

The packager's production problem will be simplified. There will be fewer changeovers. Fewer materials to stock. Less paper work. The supplier can increase his output. He will have less waste and can use his working hours to better advantage. These benefits, in turn, create others.

The Phoenix Metal Cap Co. has long upheld the doctrine of simplification and standardization. Thus it is significant that two of the glass finishes specified in the simplification and standardization program require closures that were originally developed and introduced by Phoenix: The C T Cap, and the Phoenix Compo (or P C) Cap. Both are simple, standard, practical closures. And, both are well adapted to the new era of packaging. Here, again, percentages enter into the picture . . . as a goodly number of users of glass packages will readily attest.

PHOENIX METAL CAP CO.

2444 West Sixteenth Street
CHICAGO

3720 Fourteenth Avenue
BROOKLYN

CHARLES A. BRESKIN, Publisher
CHRISTOPHER W. BROWNE, Editor
PEARL HAGENS, Managing Editor
IRIS VINTON, Associate Editor
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Modern Packaging

MARCH 1942

VOLUME 15 NUMBER 7

APRIL

The April issue of Modern Packaging will be the long-awaited All-America Package Competition number. Can't tell you now who the winners are—please don't ask! But next month you'll have the full story. Each winning package will be illustrated and its accompanying case history will tell what the objectives were, what research preceded it, who designed it, what materials were used and who supplied them. When possible, information as to sales effectiveness will be included. Packaging machinery lines will be illustrated, diagramed and described in full. Prize winning window and counter displays will be shown. This is a complete picture of 1941 package developments prior to the full impact of materials shortages, although the record also includes experimentation with substitutes, too. This isn't mere history—it's also guidance by example for the difficult days ahead and for the dawn of a new tomorrow after the emergency is over.

● WAR EFFORT

Will Standardization Kill Individuality?	31
WPB Tin Order	37
Conversion—Conservation—Control! (a digest)	41
(with table showing recommendations for paper and pulp program)	
Wanted: New Canned Meats for Soldiers	48
Standardize to Save (glass containers)	58
Canners Face Grim Year with Determination (convention report)	60

● GENERAL

Judging the All-America (preview)	44
Design Histories	46
Packaging Pageant	50
Unspillable Ink Bottle	52
Breather Wraps for Avocados	56
Good Boxes with 16 Per Cent Less Board	64
Packaging Show Geared to Changing Tempo	82

● DISPLAY

Units That Made Best Sales Records in 1941	67
Display Gallery	74

● TECHNIQUE

South American Way for Carter's Pills	77
Machines Speed Book Club Mailings	79
Roll-Leaf Hot Stamping and Embossing	80

● DEPARTMENTS

U. S. Patent Digest	84
Equipment and Materials	86
Plants and People	88
For Your Information	90

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F. L. POSNER, Circulation
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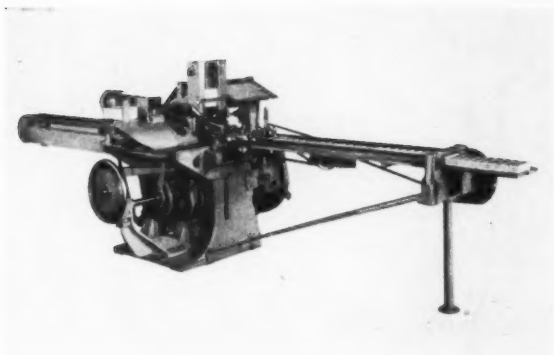


"MUSEUM
PIECE" TODAY

...IT WAS "TOPS" IN CARTONING
MACHINES BACK IN 1915

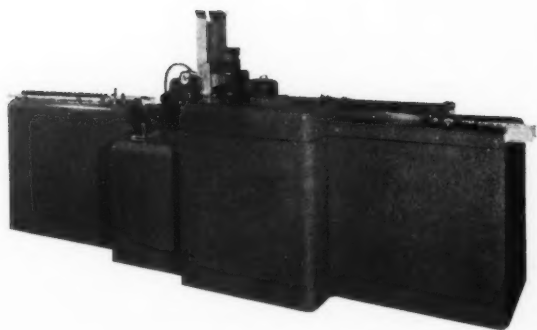
at BRISTOL-MYERS CO.

Gone with model "T" Fords, crystal radio sets, and other pioneers in their field, are cartoning machines like this. But, though this *very early model* Redington is a "museum piece" today, it was a *vast improvement* over hand cartoning when Bristol-Myers Co. "hired" this machine to carton Sal Hepatica back in those first World War days of 1915. True, its output was much *less than 50* cartons a minute . . . but so *well satisfied* were Bristol-Myers executives that a total of 3 Redingtons were installed at the Brooklyn plant to carton the *soaring output* of Sal Hepatica.



A far cry from its pioneer "ancestor" of 27 years ago is the . . .

←-----1942 MODEL



(pictured at the lower left) for Bristol-Myers' Vitalis. Turning out *more than 150 cartons a minute*, this Continuous Loading Cartoning Machine is quickly *adjustable* for two sizes—the 1 oz. and the 4 oz. Vitalis bottle. It's typical of a number of Redingtons now on the job for Mum, Vitalis, Sal Hepatica and other Bristol-Myers packages.

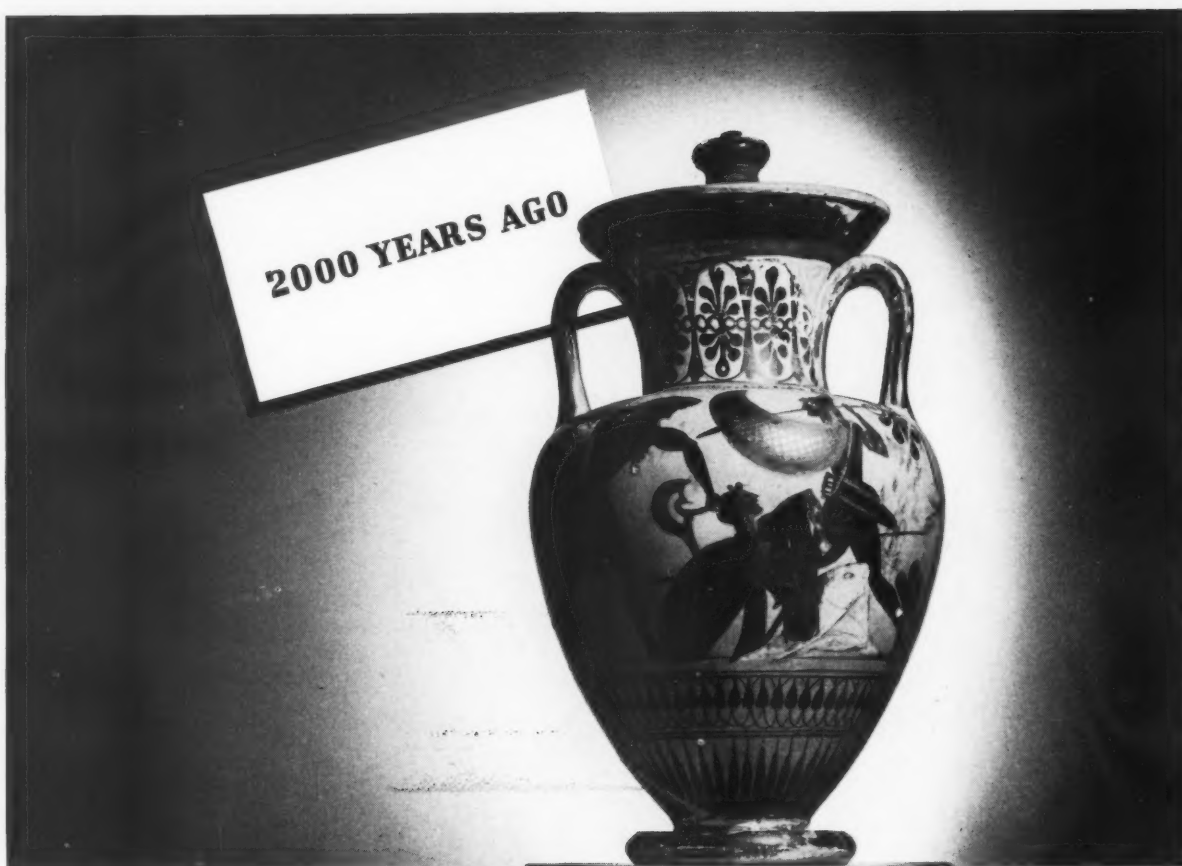
This modern Redington has *many hidden* engineering improvements the 1915 model never had, *among them*: turned-and-ground shafting, self-aligning roller bearings, Twin Disc Clutch, variable speed drive, and a skip carton mechanism.

This engineering and mechanical *skill* developed in the Redington organization is being put to excellent use in the *defense of our country*.

F. B. REDINGTON CO. (Est. 1897) 110-112 So. Sangamon St., Chicago, Ill.

REDINGTON PACKAGING MACHINES *

for CARTONING • WRAPPING • SPECIAL PACKAGING



Courtesy: University Museum, U. of P.

MASTER CRAFTSMEN

BALTIMORE, MD., Maryland Paper Box Co.	NASHVILLE, TENN., American Tri-State Paper Box Co.
BOSTON, MASS., Bicknell & Fuller Paper Box Co.	NEWARK, N. J., Mooney & Mooney; Newark Paper Box Co.
BROOKLYN, N. Y., Specialty Paper Box Co.; E. J. Trum Co., Inc.	PAWTUCKET, R. I., Shaw Paper Box Co.
BUFFALO, N. Y., Thoma Paper Box Co.	PHILADELPHIA, PA., Datz Mfg. Co.; Walter F. Miller Co., Inc.; Royal Pioneer Paper Box Co.; Edwin J. Schoettle Co.; Sprowles & Allen
CHATTANOOGA, TENN., Atlas Paper Box Co.	PORTLAND, ME., Casco Paper Box Co.
CHICAGO, ILL., Kroeck Paper Box Co.	PROVIDENCE, R. I., Hope Paper Box Co.; Taylor Paper Box Co.
COLUMBUS, OHIO, Columbus Paper Box Co.	SEATTLE, WASH., Union Paper Box Mfg. Co.
DANVERS, MASS., Friend Paper Box Co.	ST. LOUIS, MO., Great Western Paper Box Co.; Moser Paper Box Co.; F. J. Schleicher Paper Box Co.; Service Paper Box Co.
HARRISBURG, PA., The McClintock Corp.	UTICA, N. Y., Utica Paper Box Co.
KANSAS CITY, MO., Crook Paper Box Co.	
LEBANON, PA., Lebanon Paper Box Co.	
LOUISVILLE, KY., Finger Paper Box Co.; Kentucky Paper Box Co.	
MERIDEN, CONN., Shaw Paper Box Co.	

Cooperating Suppliers:

Appleton Coated Paper Company; Blackstone Glazed Paper Company; DeJonge, Louis & Company; Hampden Glazed Paper and Card Company; Hazen Paper Company; Holyoke Card and Paper Company; Holyoke Coated & Printed Paper Co.; Hughes and Hoffman; Lachman-Novasol Paper Company; Marvelum Company (The); Matthias Paper Corporation; McLaurin-Jones Company; Middlesex Products Corporation; Nashua Gummed and Coated Paper Company; Paper City Manufacturing Company, Inc.; Riegel Paper Corporation; Frank Schulman Paper Company; Stokes and Smith Co.; Sullivan Paper Company; Charles W. Williams & Co., Inc.



SET-UP PAPER BOXES
EXCEL IN SALES APPEAL

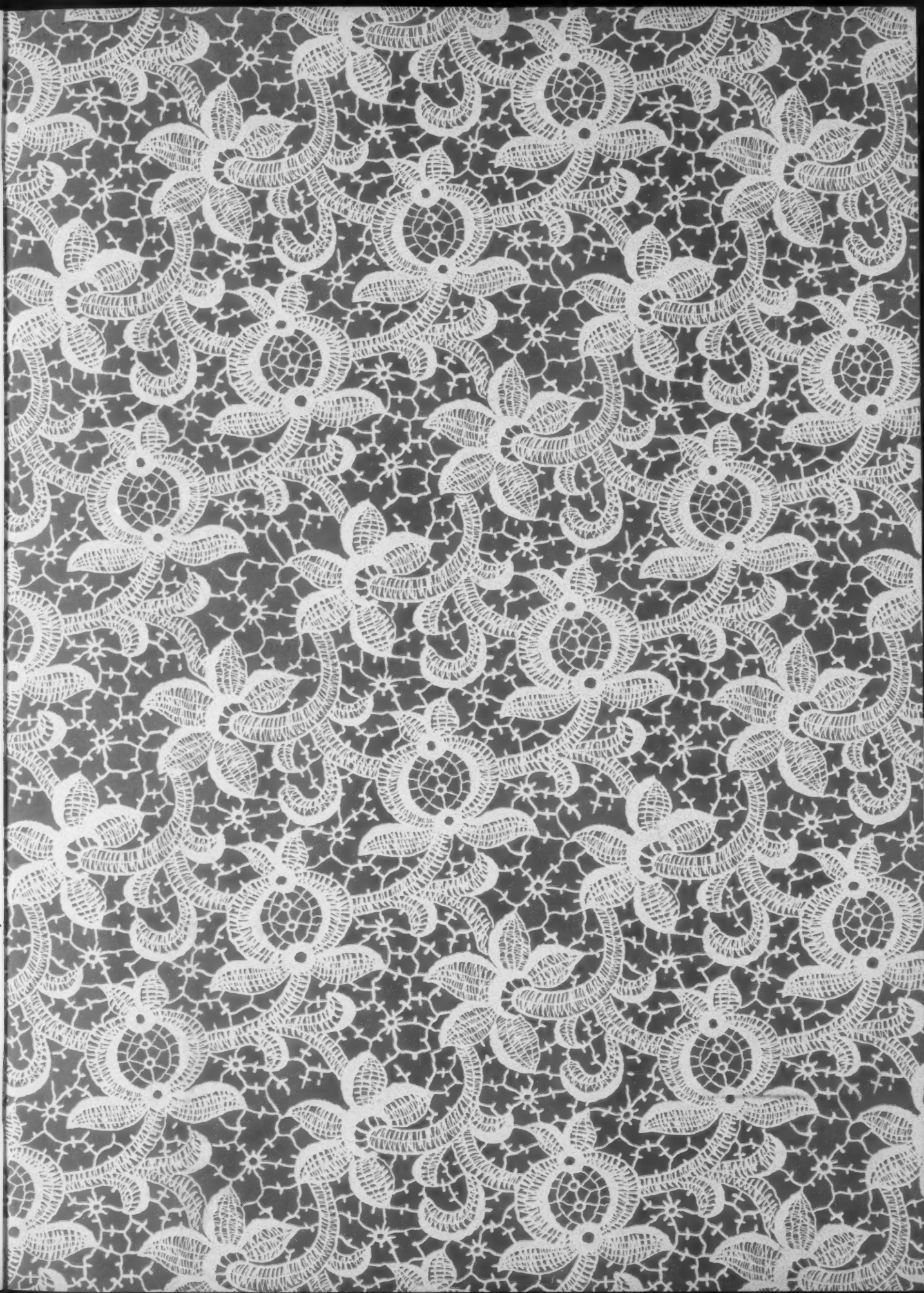
Copyright 1942, Master Craftsmen

EVEN 2000 years ago there was a firm conviction that in order to win the buyer's approval you must first please the eye. This sound fundamental has withstood the upheavals of dynasties, the plagues of wars and economic depressions—down through the centuries.

In the marketplaces of this troubled 20th Century the critical point of most transactions is still the "Point of Sale"—no matter whether the sale is to an industrial buyer, a professional man, a distributor of private labels, or to Mrs. Jones of Main Street. That's where competing products, side by side, strive for the buyer's favor—that's where years of research and development, months of toil and hundreds of thousands of dollars of promotion effort can vanish into thin air because the package did not win the necessary approval—at the "Point of Sale."

The Master Craftsmen of the Set-Up Paper Box Industry are specialists in building "Sales Appeal" into packages, whether it is to be utility value, eye appeal, or both. These firms have a combined business experience of more than 2000 years to place at the disposal of any manufacturer desirous of adding to the "Sales Appeal" of his packaged products. Consult the list of these Master Craftsmen given here for the names of the Set-Up Box Manufacturers in your area who feature the Seal of the Master Craftsmen. Call one of them in to work with you on your "Sales Appeal" packaging problems. Their experience will enable you to obtain better packaging with materials available under wartime conditions. No obligation.

MASTER CRAFTSMEN
of the SET-UP PAPER BOX INDUSTRY
ROOM 1106, LIBERTY TRUST BUILDING, PHILADELPHIA, PA.



VELVET CHINTZ

C-75 Lace

Our March Offering

This lace development has a strong appeal and should cover most any type of box with attractive results. Due to the versatility of this style of design, many unusual color treatments have been worked out and sample sheets are ready for mailing. This offer only comes once, so why not send for this set of C-75 Lace work sheets now, and set them aside for future use if you have no immediate need.

Hampden

GLAZED PAPER AND CARD COMPANY
Holyoke, Massachusetts

SALES REPRESENTATIVES

Chicago, Ill. — 500 So. Peoria St.

Philadelphia, Pa. — 414 Bourse Bldg.

New York, N. Y. — 60 East 42nd St.

San Francisco, Calif. — 420 Market St.

Toronto, Canada — 137 Wellington St. West

Fred'k. Johnson & Co., Limited — 234, Upper Thames Street

London, E. C. 4, England

Seattle, Wash. — 1203 Western Ave.

Dallas, Texas — 3905 Amherst Ave.



Worth looking into!

Business is a problem of discovery. And anything to help you discover a better way to better sales is worth looking into!

To you this means packaging your products in *glass*. For, as a result of many *new* developments, Anchor Hocking glass containers *today* offer you a host of sales-stimulating features. In addition, Anchor Hocking gives you—at *no extra cost*—the *extra* advantages of Anchor Hocking experience and facilities.

Its specialists...in design, engineering, biological and chemical research...know packaging from every angle. They are at your service, to provide first-rate technical assistance, new packaging ideas, containers and closures designed to better sell and better seal your products.

No matter what your requirements—the complete package, the containers alone or the closures alone—it will pay you to call in your friendly Anchor Hocking packaging engineer.

Worth Looking Into! Anchor Hocking Containers and Closures for Drugs



This Anchor Hocking container, (two sizes: 8 oz. *left*, and 16 oz. *right*), is excellent for effervescent salts, dry chemicals, and heavy viscosity products like cod liver oil, milk of magnesia and liquid soaps. Wide mouth means easy dispensing of contents. Container is designed for easy handling...requires minimum of shelf space...provides plenty of room for labeling...affords maximum visibility of contents. Available with either the Anchor CT Cap or the Anchor Amerseal (described below).



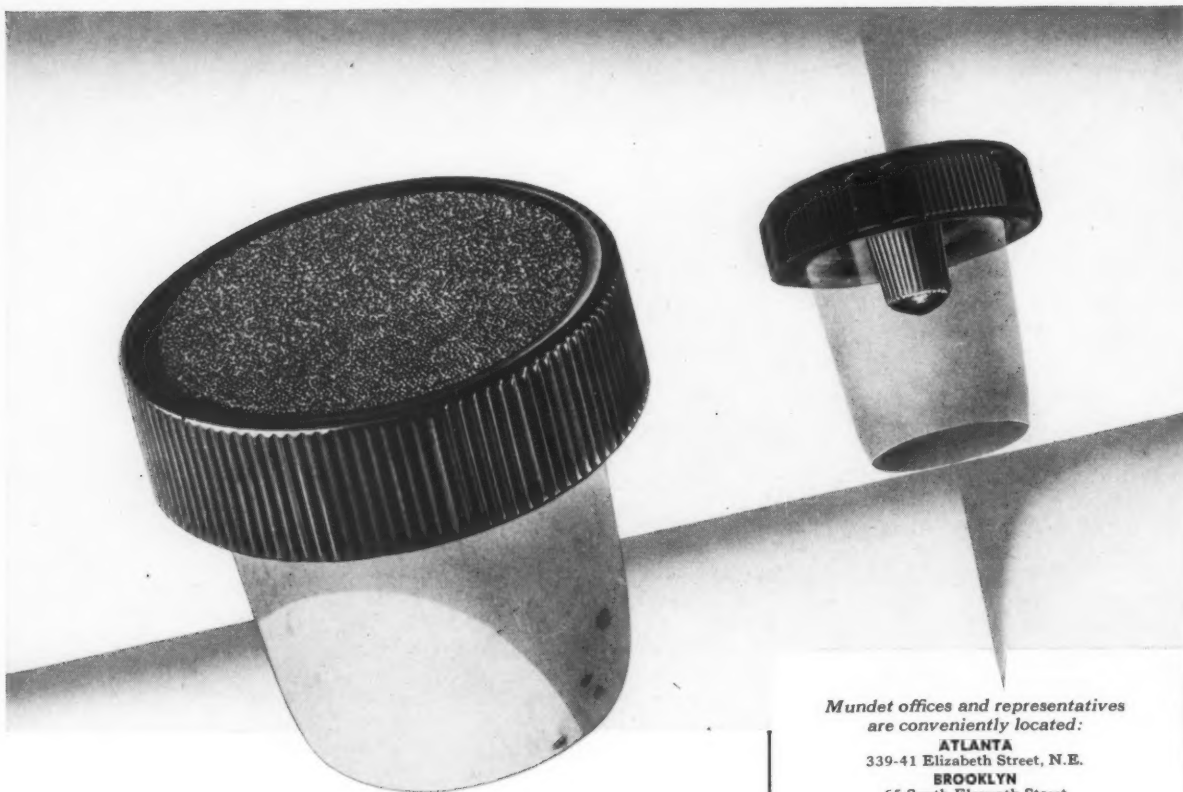
The Anchor Amerseal Cap...Its equally spaced lugs engage under side of glass container lugs, draw cap down, compress liner in tight, even, complete contact with container finish. No thread matching, as in screw caps. A quarter turn and it's off or on. Will not corrode, rust, gum or freeze to container finish.

ANCHOR HOCKING



GLASS & CAPS

ANCHOR HOCKING GLASS CORPORATION • LANCASTER, OHIO



DEPENDABILITY

Give your glass-packed products the safe and dependable sealing of Mundet Closures. Various types of Mundet corks, crowns and cap closures provide practical answers to present-day sealing problems. Through more than 75 years of experience in meeting the sealing requirements of drugs, cosmetics, beverages and other products sold in glass containers, we have gained a thorough knowledge of individual needs. Why not see if we can be of help to you? Mundet Cork Corporation, Closure Division, 65 South Eleventh Street, Brooklyn, N. Y.

Mundet offices and representatives are conveniently located:

ATLANTA
339-41 Elizabeth Street, N.E.
BROOKLYN
65 South Eleventh Street
CHICAGO
2959 North Paulina Street
CINCINNATI
427 West 4th Street
CLEVELAND
Britten Terminal, Inc.
DALLAS
505 Southland Annex
DENVER
The Stone-Hall Co.
DETROIT
335 West Jefferson Avenue
HOUSTON
Commerce and Palmer Streets
JACKSONVILLE, FLA.
Laney & Delcher Warehouse
KANSAS CITY, MO.
1428 St. Louis Avenue
LOS ANGELES
1850 North Main Street
LOUISVILLE
Kentucky Bottlers Supply Co.
MEMPHIS
Memphis Bonded Warehouse
NEW ORLEANS
432 North Peters Street
PHILADELPHIA
2226 Arch Street
ST. LOUIS
2415 South Third Street
SAN FRANCISCO
440 Brannan Street
also J. C. Millett Co.
In Canada:
Mundet Cork & Insulation, Ltd.
35 Booth Avenue, Toronto

MUNDET

CLOSURE SERVICE

MOLDED CORKS • MOLDED SCREW CAPS • EMBOSSED WOOD-TOP CORKS • CROWNS • PLAIN CORKS

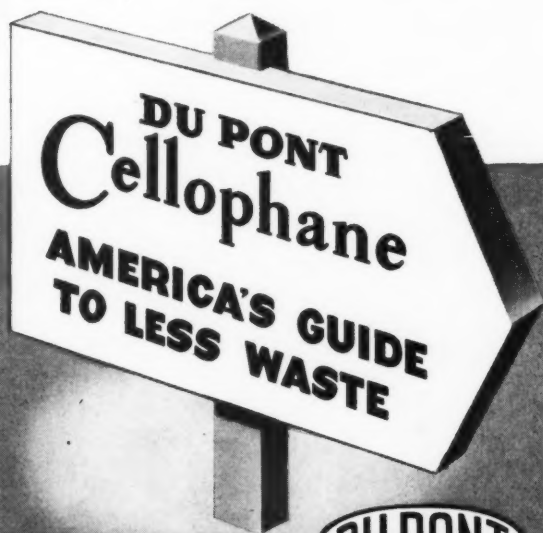
In the light of our NATIONAL NEED

[A MESSAGE ABOUT YOUR PACKAGE]

PACKAGES are scrutinized today from new angles. One vital question is: Does it meet the national need for prevention of waste? To this important effort, Du Pont contributes a four-point program to help manufacturers, dealers and consumers:

1. By providing DuPont Cellophane to aid in the conservation of our essential products.
2. By devoting the research efforts of the Du Pont laboratories to maintain the protective values of Du Pont Cellophane.
3. By making Du Pont technical service readily available to help industry meet changing problems in packaging and merchandising.
4. By urging people, through national advertising, to prevent waste—and telling how products in Du Pont Cellophane contribute to conservation efforts.

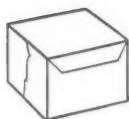
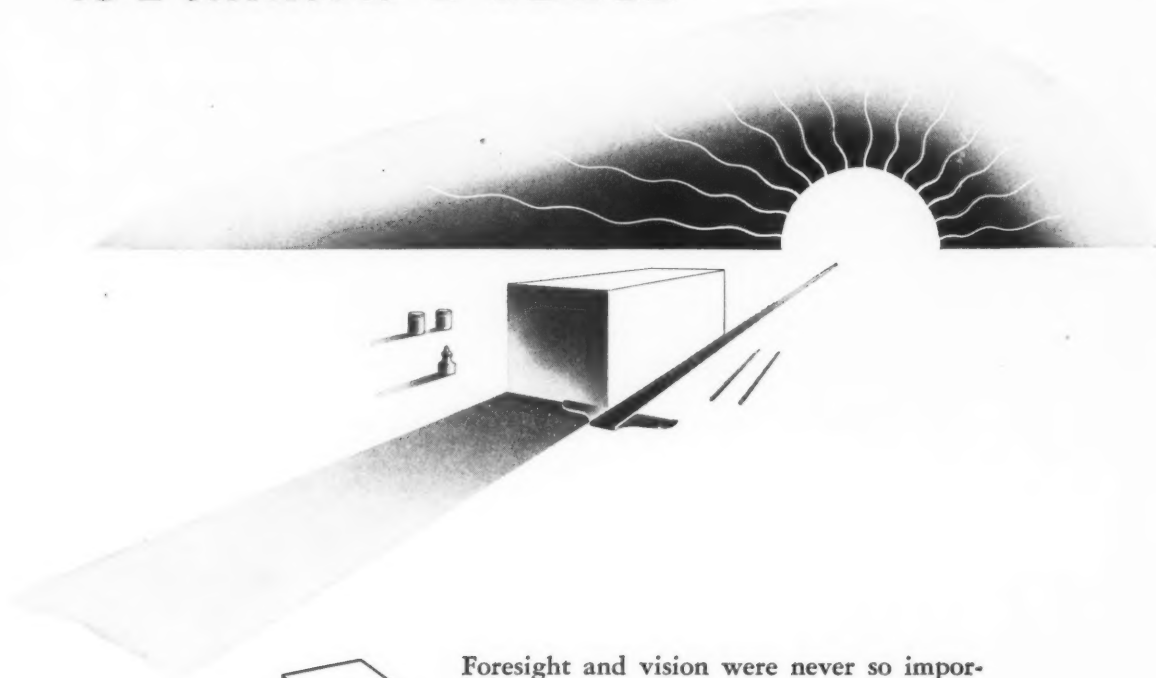
TODAY, CELLOPHANE contributes to America's need by protecting the freshness, flavor and cleanliness of many products. TOMORROW, in addition to this vital conservation job, Cellophane will be of value for its ability to increase sales.



*Prevention of waste
is a national need*

E. I. DU PONT DE NEMOURS & CO. (INC.)
WILMINGTON, DELAWARE

Tomorrow's Leadership... is Planned TODAY



Foresight and vision were never so important as they are today.

When the war is over, business will need and feel the tremendous impact of new and improved materials and products now being conceived.

Although the urgency of present production makes package planning and improvement seem far removed, the day will come — and perhaps suddenly — when today's long-range planning will help you bid for leadership.

Sutherland artists and package designing engineers are free now to start this planning for you. Tell them your needs and they'll work out practical new designs for quick production when the battle for business begins again.

SUTHERLAND PAPER CO.

KALAMAZOO, MICHIGAN





The seal of a packaging expert

PACKAGING expert? Why, the owner of that seal lived in the Middle Ages! What could he know about modern packaging?

Plenty. He knew that a package should protect its contents. That's why he sealed his letter with wax. Then the message was protected against prying fingers and eyes. A broken seal was evidence of tampering.

He knew also that his personal seal stamped in the wax identified the package—quickly told the receiver who the package was from. The 'seal, in a manner of

speaking, was his personal trade-mark.

Why not take these packaging tips from the Middle Ages?

If you're looking for a package that will give your product complete protection, Continental can help you. Continental containers will not break, chip or crack. They're sturdy but light, easy to fill and pack, less costly to ship.

As for trade-marks, they were in use when a fellow named Gudea, who was the first to use a signet ring seal, was a babe in arms. And he died 5,000 years

ago, at least. In fact, trade-marks have been in existence for as long as men have been proud of their products.

Showing you how to feature *your* trade-mark where it means the most, on your product's package, is a feature of Continental's complete packaging service—a service that takes in *every* angle of packaging.

If you have any packaging problem—whatever your product may be—call for Continental. Our sales representatives are always at your service.

CONTINENTAL CAN COMPANY

New York

Chicago

San Francisco

Montreal

Toronto

Havana



KIMBLE Moulded CONTAINERS

Individualized
TO CREATE DISTINCTION



For

A NEW VERSION OF YOUR *OLD* PACKAGE
A RAPID ACCEPTANCE OF YOUR *NEW* PRODUCT

*Consult
Kimble*



• • • *The Visible Guarantee of Invisible Quality* • • •

KIMBLE GLASS COMPANY • • • VINELAND, N. J.

NEW YORK • PHILADELPHIA • DETROIT • CHICAGO
BOSTON • INDIANAPOLIS



Conserve and Sell
at POINT OF PURCHASE

**Maintain your
Indispensable
Sales Tools**

One
DISPLAY FRONT

**MULTI-DUTY
DISPLAY**

**CUTS STOCK
REQUIREMENTS
TREMENDOUSLY**

**ANY DESIRED NUMBER OF
SEPARATE, REMOVABLE
ILLUSTRATIONS**

Vital ITEMS OF
PRINTED SALESMANSHIP
WINDOW DISPLAYS • COUNTER
DISPLAYS • FLOOR DISPLAYS •
WALL DISPLAYS • FESTOONS •
PENNANTS • WINDOW POSTERS

OUR GOVERNMENT has requested substantial savings in materials, including paper and paperboards. Such savings CAN be accomplished, and YOU CAN CONTINUE YOUR SALES-INDUCING PRINTED SALESMANSHIP AT THE ALL-IMPORTANT BUYING SPOT.

The TOP NOTCH window display, with its separate and removable illustrations (lithographed on both sides of a sheet of stock which is held in curved position in the display front) is one FORBES solution . . . we can show others. New solutions are being developed.

Write, wire or phone for a FORBES sales executive to call

FORBES



LITHOGRAPH CO.

P. O. BOX 513 • BOSTON

NEW YORK

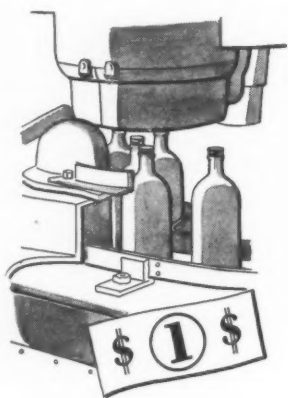
CHICAGO

CLEVELAND

ROCHESTER

Packaging Insurance*

PAYS **3** DIVIDENDS



FIRST DIVIDEND,

paid when the container is being sealed, is in the form of low production costs. With Alseco Machines, operating speed is high, and down-time for repairs or adjustments is low.



SECOND DIVIDEND,

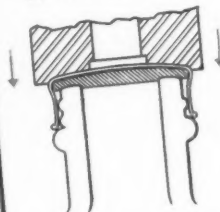
paid when the product reaches the retailer, is a reduction in goods returned because of inefficient seals. With Alseco R-O Seals, leakers and breathers are practically unheard of.



THIRD DIVIDEND,

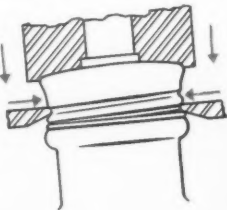
paid when the consumer gets the product, is in the form of good will. The consumer finds that Alseco R-O Seals open and reclose easily, and he gets the product just as you packed it.

* HOW YOU GET "PACKAGING INSURANCE" BY THE ROLLED-ON METHOD OF SEALING



1. Plain-skirted Alseco Seal is uniformly sealed. Under stationary top pressure, container lip is embedded in liner evenly all around.

2. While held in that position, threads are Rolled-On to conform exactly to threads on container. Each seal is tailor-made, fits perfectly.



Trade Mark Reg.



U. S. Pat. Off.

If your product is sometimes tampered with before it reaches the consumer, there is a Rolled-On remedy for this. Adulteration, substitution and pilfering can be stopped with certain Alseco Seals.

Because the Rolled-On principle is adaptable, special types of Alseco Seals can often be designed to meet other problems that standard closures do not answer. * * *

War has stopped the sale of Aluminum for seals. However, most types of Alseco Seals can be supplied in metals other than Aluminum.

TAILOR-MADE

ALSECO SEALS

ALUMINUM SEAL COMPANY, 1345 THIRD AVENUE, NEW KENSINGTON, PA. . . At your service: 28 years of experience building quality seals and sealing machines.



"**FOOD** **WILL WIN THE WAR** **AND WRITE THE PEACE**"

WICKARD

Mountains of food, more than the human mind can imagine—good food, packaged so that it will be palatable and nourishing after it has traveled thousands of miles or laid in storage for months. That's the job Secretary of Agriculture Wickard has pointed out to farmers, to the public and to the food industry.

It's a tremendous job, but one that is being accomplished. Among other things, it requires vast quantities of protective packaging papers—countless special and standard grades of the type the Riegel Mills have long produced and frequently pioneered. If it brings new packaging problems to you, we are well equipped and willing to assist in their speedy solution.

RIEGEL PAPER CORPORATION
342 Madison Avenue, New York, N. Y.



TODAY when Conservation is vital to the nation's war program, small "Cel-O-Seal" bands make an important contribution. On wine, drug and medicinal packages, they secure closures firmly in place; hence—

1. Keep the product in, safe from evaporation, and
2. Keep destructive or harmful influences out.

"Wind-O-Band" seals—the kind made for distilled spirits packages—provide this protection, too; and, moreover, protection of U. S. Government Tax Stamps.

"Cel-O-Seal" also "tops off" glass packages attractively, and provides individuality—and often a "second label"—for the bottle or jar that wears it.

Listen to "Cavalcade of America," Mon. night, coast-to-coast NBC Red Network



*Our Telephones
are Always Ringing*

...for **WARNERCRAFT DESIGNS**
for **WARNERCRAFT QUALITY**
for **WARNERCRAFT SERVICE**

IT SPEAKS well for the future to see so many farsighted manufacturers who refuse to coast along on a surplus of orders. They know that coasting only leads downhill. In looking toward tomorrow's intense competition, they hasten "to get their house in order" by building increased consumer demand for their products.

Many of these farsighted manufacturers come to Warnercraft for information, designs, estimates and consultations on packaging and display problems. They have come to know that Warnercraft quality and service save them time, safeguard their investment, build up their sales. They trust in the experienced advice of Warner representatives, long trained in service to the packaging industry. They respect Warner efficiency and up-to-the-minute equipment. They know they can get, from Warnercraft, deliveries as quick, prices as reasonable, quality as high, advice as sound as from any other top rank package maker in America today.

The proof is in the many well known companies served by Warnercraft, and in the many years it has served them. Why not compare your facilities with those at Warnercraft? After all, it's easy to phone or write; there's no obligation whatsoever — and you are sure to find the consultation to be time very well invested.

WARNERCRAFT

Makers of set-up and folding boxes of all types, transparent acetate containers, hand made specialties, counter displays and dispensers.

THE WARNER BROTHERS COMPANY

Main Office and Factory: 325 Lafayette Street, Bridgeport, Conn.
New York Sales Office: 200 Madison Avenue, New York, N. Y.



SILVERWARE
MANUFACTURERS



HARDWARE
MANUFACTURERS



DEFENSE
CONTRACTORS



DRUG
MANUFACTURERS



PERFUME
MANUFACTURERS



FOOD
MANUFACTURERS



OFFICE
APPLIANCE
M'F'RS



SPORTING
GOODS M'F'RS



ADVERTISING
AGENCIES



WEARING
APPAREL M'F'RS



STATIONERY
MANUFACTURERS



CANDY
MANUFACTURERS



JEWELRY
MANUFACTURERS



HOUSEWARES
MANUFACTURERS



NOTIONS
MANUFACTURERS

NEXT MONTH! APRIL

IS THE BIG ISSUE

(THE ALL-AMERICA and PACKAGING SHOW ISSUE)

★ ★ ★ OF MODERN PACKAGING ★ ★ ★

The largest—most important—most beautiful issue of the year is coming next month, in April. A huge section—probably around 130 pages—will be entirely devoted to the prizewinners—the 57 outstanding All-America Package Competition Awards in all fields from Bakery Products to Shipping Containers. Each winner is covered from every angle in beautiful full-page and supplementary photographs and in complete, detailed editorial analysis and description. As the best package in its particular field, each will have great significance. The reasons why, the production angles, the design story, the marketing picture of each, which will be covered in the editorial treatment, will provide packagers with 57 case histories of outstanding achievements from which many lessons can be drawn and used in particular businesses.

THE SUMMATION OF A YEAR'S EXPERIENCE

This edition of Modern Packaging is the record of packaging progress during the preceding year. The winning packages, which are treated in such detail, are the highest expression of packaging art and technique during 1941.

Selected by experts from more than 20,000 entries, they provide a source of constant reference and inspiration to packagers. Each year this All-America issue devoted to them, is read carefully and filed by Modern Packaging readers, who know its worth as a source of new facts and ideas in the packaging field.

Reserve your copies of this special prizewinners number *now*!

Price of
special**\$2. per copy**
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MODERN PACKAGING MAGAZINE

BRESKIN PUBLISHING COMPANY

122 East 42nd Street



New York City

**What you save
today may save
your business
tomorrow...**



*Two booklets that give you a
wealth of practical packaging
information to help you save
time, save space, save dollars.*

WHILE H & D's mills and factories push production at top speed to meet ever-increasing demands of American business, the scope of Hinde & Dauch Package Laboratory services is extended to help manufacturers attain more efficient packing and storing methods as well as more efficient packaging.

Under this program, two sections of "The H & D Little Packaging Library" are now ready for distribution. These booklets are full of practical suggestions on how to simplify your shipping, packing and storing, thus conserving time, space and material.

There are a number of tricks to packing and

sealing. "How To Seal" tells you which way is best for your products.

There are a number of tricks to stacking and loading. "How To Stack & Load" gives you many worthwhile suggestions on how to reduce damage, how to save time and money.

Just as the services of H & D Package Engineers are available without obligation—the booklets are yours for the asking. Very likely you will want extra copies for key men in those departments where the information they contain can profitably be employed. Write for copies, they will be sent to you promptly.



HINDE & DAUCH *Authority on Packaging*

4214 DECATUR STREET • SANDUSKY, O.

FACTORIES IN BALTIMORE • BOSTON • BUFFALO • CHICAGO • CLEVELAND • DETROIT • GLOUCESTER, N. J.
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When paper puts on a coating of pyroxylin ★

—the minimum use of this expensive solution is a *must*. The answer: even distribution over a smooth, level surface. Base stock paper is often subjected to extra processing at extra cost. Fitchburg Pyroxylin Papers, supercalendared only, eliminate these expensive processing extras and provide the more widely usable lighter weights. This is because F.P.P.'s *start* with the requisite *truly level* surface!

Truly level is a natural process. It endows paper with a surface affinity . . . more receptive . . . more retentive . . . more faithful . . . to impregnating, bonding, laminating, superimposing substances and materials.

Fitchburg Truly Level Base Stock Papers are custom-made. They possess many and varied chemical and physical properties. *Truly level* supplements these properties. To all of them it provides the ideal base stock *foundation*. This foundation has solved many sales-research-de-

velopment problems. It is destined to help launch other developments into *the post-war battle to win orders*.

Here are groups of these foundation papers already developed to meet specific needs of printer, packager, converter. Embryo needs and applications may require the incubator of paper research. We have that incubator. Let's get together!

ALKALI PROOF PAPERS
for soap, chemicals, dyes, etc., or wherever an alkali condition exists

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including Snowwhite-Stiktite, an exclusive Fitchburg development

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with the strength and surface qualities for your particular needs

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with a surface specially adapted to lacquer applications

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and Combining Papers, both free and ground-wood, for board mills and box makers

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High super finishes to secure best results with minimum of coating solution

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INJECTION MOLDING

Typical example of a gas mask for which LUMARITH parts are supplied.

TRANSFER MOLDING

Gun stocks, pistol grips, rifle butts, trigger guards, etc.

TO CONTRACTORS AND SUB-CONTRACTORS WORKING ON WAR ORDERS

On contracts where plastics are required, (for insulation, transparency, toughness, lightness with strength, etc.) or where plastics can step up the production rate (by injection, compression, or transfer molding; extrusion; lamination; etc.) specialized experience can save valuable time in setting up plastics production schedules, and in mastering new techniques of applying plastics.

In the interest of "speed and speed now," we offer to pool the knowledge of our engineers with your experience wherever it will help. Because our company is the oldest in the industry, we can provide experience records and data not generally available. It is our desire to share this knowledge with any company in the "Victory business." Replies to this message, in regard to advice or materials, should be addressed to *War Materials Division* for quick identification and attention.

Celanese Celluloid
CORPORATION

COMPRESSION MOLDING

For caps and closures on other LUMARITH parts.

LAMINATION

Lamination for slot insulation, for preserving essential documents and laminated fibre for sealing coils to spool bands.

SHATTERPROOF WINDOW MATERIAL

VINYLITE Coated Wire and LUMARITH PROTECTOID laminated scrim for shell-loading plants, temporary housing, and for protection from shattered window glass.

EXTRUSION MOLDING

Moldings for aircraft windows, barracks, marine installations, and defense housing.

LUMARITH and LUMARITH PROTECTOID

Celanese Celluloid Corporation (formerly Celluloid Corporation), 180 Madison Ave., New York City. Sole Producer of Celluloid* (cellulose nitrate), Lumarith* (cellulose acetate), Lumarith Protectoid* (transparent packaging material), H-Scale* (synthetic pearl essence), Lindol* (plasticizer and lubricant additive), Samson* and Safety Samson* Film Bases, and Vimlite* (shatterproof window material). *Trademarks Reg. U.S. Pat. Off.



A man behind a



d a microscope 500 miles away

HELPED CATCH THIS WOMAN'S EYE

YES, a chemist peering into a microscope at boxboard fibres, helped stop this woman in her tracks. So did scores of other technicians in the Gardner-Richardson plants whose Precision-Engineering standards mean crisper, livelier, more eye-arresting cartons . . . order after order . . . year after year.

How "Precision-Engineering" enables Gardner-Richardson to mass-produce cartons with greater eye-appeal

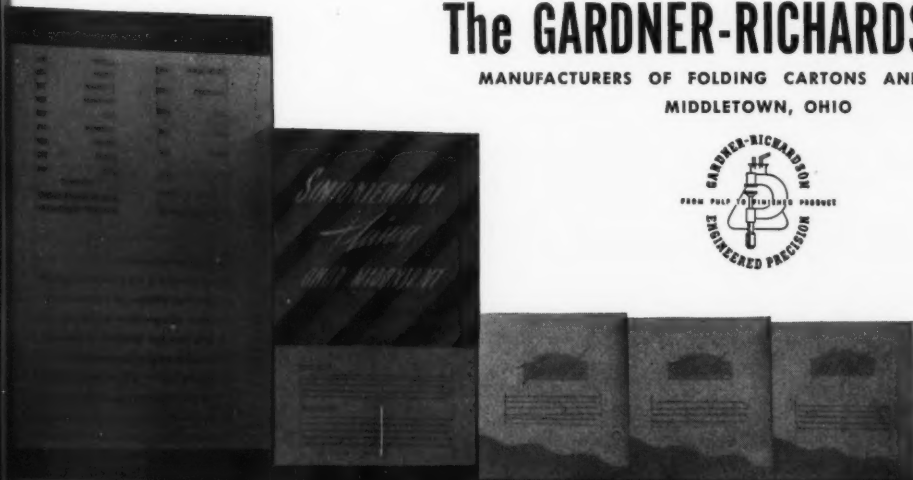
At Gardner-Richardson, we have set a standard for ourselves: "*Precision-Engineered.*" And we live up to that standard . . . every one of us from the workman who

tends a pulp-beater, to the foreman who "Okays" a press sheet, from the "front office" to the girls on the inspection line. "*Precision-Engineered*" means the enforcing of rigid controls . . . the production of boxboard that is *uniform*, with better folding and sealing qualities. It means cleaner, more brilliant printing, more exacting cutting and creasing.

And the result? — Gardner-Richardson Cartons speed off of retailers' shelves and into the hands of women who "eye" before they buy. Just as they speed through filling and sealing machines with fewer jam-ups, fewer "leakers," less waste.

The GARDNER-RICHARDSON Co.

MANUFACTURERS OF FOLDING CARTONS AND BOXBOARD
MIDDLETOWN, OHIO



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MODERN PACKAGING

will be

AT HOME

to all

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HOTEL ASTOR

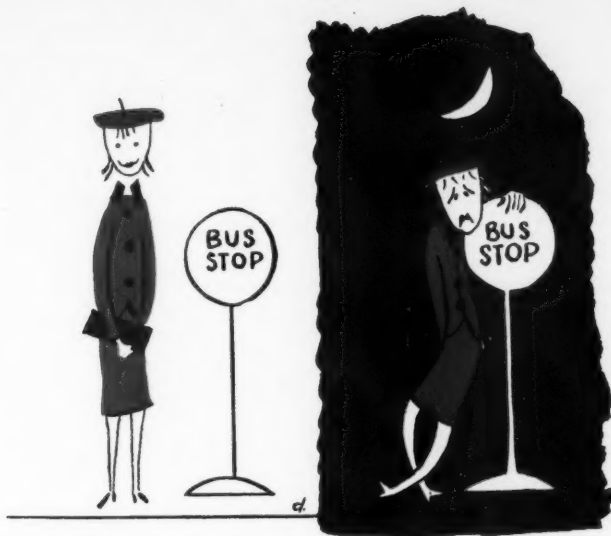
Booth #510

Broadway at 44th Street

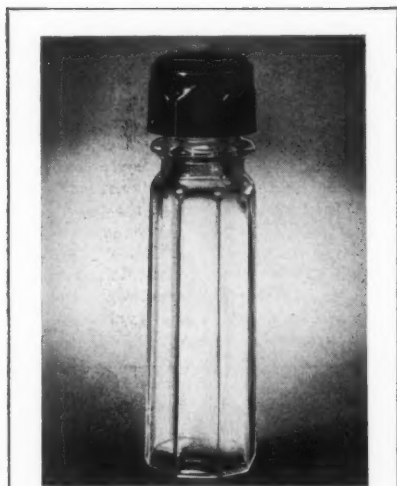
New York City

APRIL 14th, 15th, 16th, 17th

1942



"THE LONGER SHE STANDS
THE SHORTER SHE GROWS"



Stock bottle #848—a container that won't stand on your dealers' shelves for long after customers get a chance to buy it. Capacities: $\frac{1}{2}$ dram and 1 dram. Finish: 10 mm. 425.

THE best toast you can offer your newly launched package is: "A short shelf-life and a lively one!" The longer your container warms the shelf, the shorter will be the retailer's profit. Until one day he decides that your package is not paying its rent—and back it goes to the storage room.

Of course, your package has to last through the time-consuming processes of distribution. Of course, it has to look like a debutante, when it makes its sales debut, and not like a dowager.

And Carr-Lowrey containers can last with the best of them—for centuries, if need be. But that isn't our sole test of superiority—and it shouldn't be yours. Carr-Lowrey clear flint glass and opal containers are good packages because they help sell goods quickly. We know how to design in glass—how to produce in glass. We think we can please both you and your market.

CARR-LOWREY



3-Point Service

creates

PRACTICAL • ATTRACTIVE • ECONOMICAL

glass packages for cosmetics,
drugs, foods, household products.

Carr-Lowrey Glass Co.

Factory and Main Office: BALTIMORE, MD.

New York Office: 500 Fifth Ave. • Chicago Office: 1502 Merchandise Mart



INSIDE NEWS

MARCH

PREPARED BY NATIONAL CAN CORPORATION, NEW YORK, N. Y.

1942

National's Research Chemists study gases in relation to canning problems

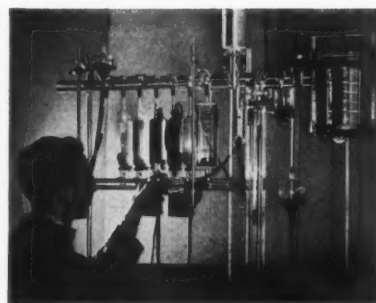
Air or oxygen so essential to life, is undesirable, and often very harmful in a sealed container of a food product. The oxygen of the air remaining in the container when it is sealed may often cause off-flavors, a loss of flavor, or an undesirable color change in the product. Furthermore, since corrosion is accelerated by oxygen, any air left in the container on sealing may cause excessive attack of the product on the tin coating resulting in an unsightly appearance of the interior of the container, or in some cases cause direct attack on the iron base metal, producing perforation of the container and loss of the product. Well informed canners knowing these facts about the effects of air, are careful to exclude as much air as possible from the container before sealing.

Research and development relating to air removal requires an accurate method for the determination of the amount of oxygen or other gases in the container. An apparatus for this purpose is shown in the accompanying photograph. By means of this apparatus it is

possible to determine quantitatively the composition of any mixture of gases in a container.

This apparatus is also very useful in the examination of swelled cans. In certain products a type of spoilage occurs which is not due to bacterial decomposition but results from the production of hydrogen by reaction of the product with the can causing "hydrogen swells." The use of gas analysis spots the "hydrogen swells" very quickly. It is also possible to study the factors involved in the formation of "hydrogen swells" by means of experimental packs and determinations of the quantities of hydrogen produced under various conditions.

In many cases of bacteriological spoilage of canned goods, the analysis of the quantities and kinds of gases present in the spoiled containers gives very helpful supplementary information to the results of bacteriological analysis, and aids greatly in the interpretation of the results. RESEARCH IS ORGANIZED THINKING. (87)



The amounts and kinds of gases present in a container may be determined by this apparatus. The gases are withdrawn from the container into the apparatus and their volume measured. Then they are passed through various absorbing solutions in a systematic manner. Each absorbing solution reacts with and removes one of the gases. After each absorption, the volume remaining is measured, and the volume of the gas removed may be calculated. Oxygen, Hydrogen, Nitrogen and Carbon Dioxide present in a container may be determined in this way.

Wartime Effect on Canadian Packaging

The effect of the war in Canada is far-reaching. Like all sales-making businesses, packaging thrives on success. For a variety of reasons retail stores in Canada are on the increase. This means more and better packages. And the rate of increase is fairly high. War-time demands on Canadian suppliers challenged their ability to keep abreast of package material requirements.

Thanks to a development of production ingenuity plus a mechanical consciousness rather ahead of its time, problems are daily being whipped,—new and unusual conditions are being turned to advantage—and Canadian packaging, far from retrenching, continues to progress.

Well-known benefits of informative labeling are being used to boost sales, and little touches of consumer convenience are being eagerly sought after and exploited.

A trend in buying which affects packaging practice is the necessity for economy of time and effort on the part of the retailer. War service of one kind or another has depleted the merchant's sales force. Self-service emporiums of all kinds are becoming more common. Where clerks are retained, they are degenerating more and more into parcel

wrappers and change-makers. This means the package must of necessity start the sale and frequently close it as well. This explains the importance of considering visibility, identification, individuality, suggested uses, and many other sales-making factors, when a package is created or changed. (88)

Canned Squid California Style

At Monterey, California, cooked squid has been successfully canned and marketed for several years. In the peak year of 1940, 935,000 pounds of California squid were packed in 7-oz., 8-oz., and 9-oz. tall and flat tins, as well as in No. 1 tall ones.

Considered a delicacy by some, the consumption of canned squid in the United States is confined largely to the foreign-born. Since 1930, the Philippines have displaced Greece as the principal export market for the California product.

Most of the pack is made in May and June, when the mollusks are most abundant

in Monterey Bay. The squid are either packed "natural style" in their own ink, or they are fancy-packed in sesame oil, tomato sauce, olive oil or cottonseed oil. The canned product has a mild shrimp-like flavor. (89)

Mill Runs 270 Years

A grist mill in Denton, Md. that turned out flour for Washington's army during the Revolution is in daily use there in what tradition says is its 270th year of operation.

The water-powered mill is said to be unchanged since colonial days. It is in a frame building, large and roomy, and is known as James Murray's Mill. When Major Nathaniel Potter of Potter's Landing near here was commissioned to buy flour for General Washington's troops he went to Murray, who ground corn meal for the soldiers. (90)

(Advertisement)

BY NATIONAL CAN



MARCH

PREPARED BY NATIONAL CAN CORPORATION, NEW YORK, N. Y.

1942

Freestone Peach Pack

They're really giving serious thought to making a fine-quality freestone peach pack possible in South Carolina. Last Spring the experimental canning of freestone peach packs was tried out.

It is reported that during the past peach season 40 different varieties were packed in several degrees of syrup. All peaches were picked from one to three days before they began to soften on the trees, and hence were at the best stage of ripeness so far as handling is concerned. The picked fruit was stored at temperatures of 65, 55 and 35 degrees F to finish ripening, and then were taken out and canned. All were packed in halves. (91)

Formaldehyde in Tanks

Reinforced concrete tanks have been found satisfactory for the bulk storage of formaldehyde in Britain. Such tanks, it is said, are fabricated in the same way as tanks for water storage, and afterwards lined with asphalt and acid-resisting bricks to protect the cement. A cheaper, but less permanent lining may be produced by treating the concrete, after thorough drying, with hot paraffin wax, and then melting the wax into the concrete surface by careful use of a blow torch, it is added. Such linings eventually break down, it is pointed out, due to the formation of microscopic cracks in the wax. (92)

New Solvent Oil

High solvency characteristics are claimed for a new heavy aromatic oil declared to be suitable for use as a diluent for creosote oil in wood preserving compositions. Developed by a major American petroleum producer, the material has already passed American Wood Preservation Association tests. Several petroleum companies, especially on the Pacific Coast, are reported to be investigating petroleum wood preservatives suited to replace creosote oil. (93)

Paint For the Navy

It takes 10 tons of paint—approximately 1,250 gallons—to protect a 10,000 ton cruiser and 3,000 to 3,500 gallons to protect a ship of the line. Navy vessels are painted every three to six months. With a two-ocean navy, the demand from this one item alone will be greatly in excess of anything experienced in

the life time of modern navy officers. Not only is the demand for paint greater for ships of the fleet but expanding naval air operations call for another large gallonage. Equipment for the rapidly expanding personnel of the navy, land bases and training camps all call for additional volume of paint. The heavy demand for paint for defense purposes will require a larger quantity of synthetic resins and linseed oil. An attempt will be made to increase the acreage sown to flaxseed for the linseed oil. (94)

Names for Hybrid Corns

An historical system of naming new Hybrid Sweet Corn has been suggested which will permit canners who know their American history to select varieties for successive maturity dates.

New Hybrids have been developed to ripen successively at three day intervals from early July until frost, and the new naming system planned would denote the ripening period. Names suggested are—Extra Early: Standish, Plymouth, Jamestown; Early: Lexington, Washington, Bunker Hill; Early Mid-season: Madison, Jefferson, Hamilton, Marshall; Mid-season: Lincoln, Lee; Late Mid-season: Great Northern, Golden Spike, Cleveland; Late: Wilson, Pershing, Argonne; Very Late: Roosevelt, Churchill, Hull, Wavell. (95)

Military Button Polishing Kit

Here's another timely new item—packaged by National Can. A button polishing kit for men in the services. Contains polish, brush, cloth and board.



Technical Topics

AMMONIUM CARBONATE, carnauba wax, and beeswax are ingredients of a composition claimed by in new British patent to be suitable for removing grime from painted, varnished, or polished surfaces, or from unpainted materials such as wood and leather. The composition is said to be produced by mixing solutions of carnauba and beeswax in turpentine, adding a solution of ammonium carbonate at a temperature of not over forty degrees, then adding a solution of mastic or other soft varnish resin in turpentine and alcohol, and finally thinning the paste to a cream consistency with water and a petroleum thinner having a boiling point of about 120 degrees. (96)

SULPHUR in a finely divided, active state will reduce chlorate compounds from soil, brickwork, and other porous materials, recent British studies have disclosed. It was found that lime-sulphur was especially effective for introducing the finely-divided sulphur, and that the decomposition products formed in the reduction reaction are apparently harmless to plants. It is declared that chlorate in soil, in amounts sufficient to kill carnations, lettuce, and tomatoes, could be removed by soaking the soil with a 1-in-40 solution of lime-sulphur, and that the soil could then be safely planted as soon as it had dried sufficiently. (97)

THE CONTINENT OF AFRICA normally exports yearly about 20 percent of the oil-bearing raw materials and 25 percent of the vegetable oils that are shipped from the world's producing areas. There is a large potential production of these vegetable oils in areas not at present commercialized. Africa is an expressed goal in the Axis desire for colonial expansion. The United Kingdom and Germany are prominent among European countries almost totally dependent on imports for their vegetable oil needs. Africa has been an important supplier of these needs, and access to the present and potential production of oil-bearing raw materials in that continent is an important consideration to the countries involved in the present conflict. (98)

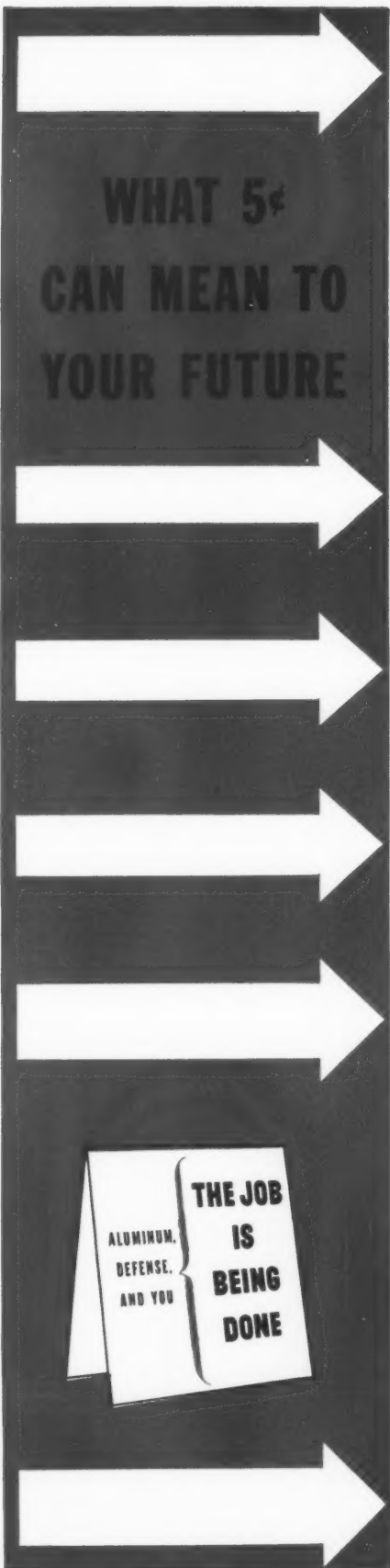
STUDIES at the New York State Agricultural Experiment Station have proved that fruit juices, such as apple juice and apple raspberry juice, reach the consumer in the best condition when packed in special enamel-lined cans. (99)

For further information on any of these articles write to National Can Corp., 110 E. 42nd Street, New York City. Please mention the number at end of article—also name of the magazine you saw it in.

(Advertisement)

MARCH • 1942

25



WHAT 5¢
CAN MEAN TO
YOUR FUTURE

ALUMINUM.
DEFENSE.
AND YOU

THE JOB
IS
BEING
DONE



HOW MUCH ALUMINUM we are making now is a censored secret. We are determined it shall be sufficient to the need.

HOW MUCH WILL BE AVAILABLE, after the war, is idle talk now.

THE PRICE OF ALUMINUM is the thing that's important. It is important to the war, because our reduction of the price of ingot from 20c to 15c is saving the Government many millions of dollars a year.

THAT FIVE CENTS doesn't make aluminum one whit more useful for war purposes—only more patriotic.

BUT IT DOES MAKE aluminum terribly important to the peace. Real peace means jobs for all. Jobs-for-all come into being only when people *want to* buy and *can* buy: Which means new things, better things, at a price.

IMAGINEERING is the word we have coined to describe the thinking which is used to get those new things ready. Imagineering is letting your imagination soar and then engineering it down to earth. Imagineering needs tools as well as brains.

THAT FIVE CENTS we've lopped off the price of aluminum, so far, has more potentialities of creating new things and better things, at a price, than any single thing we know of.

THAT'S WHERE YOU COME IN. You are the man *who*. You are the man America is counting on to make the jobs Americans are going to need. You are the man who is going to do the *Imagineering*, in your specialty, that is going to win the place for yourself, your employees, your associates.

YOU ARE GOING TO DO IT, and we hope you are going to let Alcoa help. We can, and we want to.

Aluminum Company of America, 2129 Gulf Building, Pittsburgh, Pennsylvania.

ALCOA ALUMINUM



**SMART PACKAGING MADE
INEXPENSIVE WITH
Swindell STOCK Bottles**

No delays, no "priority troubles," no investments in private moulds—when you choose one of Swindell's smartly designed stock bottles! Here are seven beauties:

J-32: $\frac{1}{2}$ oz. to 16 oz. N-30: $\frac{1}{8}$ oz. to 8 oz.
D-62: $\frac{1}{2}$ dr. to 8 oz. A-273: $\frac{1}{4}$ oz. to 16 oz.
C-39: $\frac{1}{2}$ oz. to 16 oz. A-682: $\frac{1}{8}$ oz. to 4 oz.
A-539: $\frac{1}{2}$ oz. to 32 oz.

SWINDELL BROS.

BALTIMORE, MARYLAND
200 FIFTH AVENUE, NEW YORK
ROBERTO ORTIZ—HAVANA, CUBA

A-539

J-32

D-62

A-682

C-39

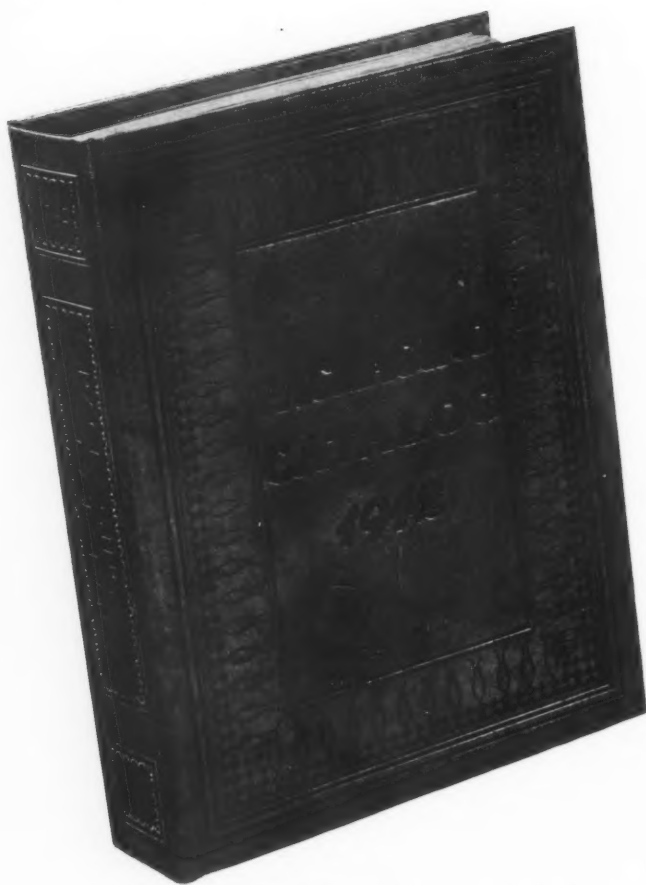
A-273

N-30

When you think of bottles think of

Swindell

WORKBOOK FOR THIS YEAR OF WORK, 1942



Now published—and selling faster than any Packaging Catalog ever printed—the 1942 edition is the packaging industries' workbook for the coming year. It has been re-designed, re-written, re-edited—in fact, completely altered to meet the needs of packagers under conditions of material and equipment shortages.

CHARTS 6 huge, important, exclusive charts provide readily accessible information on basic packaging materials and techniques. Compiled by experts to meet the demand for reliable data arranged for quick reference, these charts answer many packaging questions quickly.

They are:

Package Design Checking Chart

Properties Chart of Plastic Sheeting Used for Rigid Containers

Properties Chart of Wrapping Materials (by type)

Properties Chart of Molded and Cast Plastics Used in Packaging

Properties and Use Chart of Adhesives

Labelling Difficulties Chart—Causes and Corrections

ARTICLES The 1942 Packaging Catalog contains much that is new and a great deal of revised material. Under 17 Section Headings in 128 separate articles, the Catalog treats of every packaging material, every type of package and packaging equipment, techniques of design and production, packaging law and a host of others. It contains all the basic knowledge that several thousand experts in the various branches of packaging have to offer. This information is sifted, collated, written simply and presented in an attractive and easily referable form.

DIRECTORY SECTION The Packaging Catalog contains the only complete and up-to-date directories for packaging purchasers.

Buyers' Directory: Tells who makes each product treated in the book.

Trade Name Directory: Trade names of packaging materials and parts, with names and addresses of manufacturers.

Alphabetical Index of Manufacturers: Names listed alphabetically, with addresses, to supplement the Buyers' Directory.

The Catalog must be seen to be appreciated. The largest edition in this great series of factual reference works the 1942 Packaging Catalog is still available at } **\$5 per copy** (Canadian & Foreign: \$6)

1942 PACKAGING CATALOG
122 East 42nd Street • New York City

Our Share

We can—and do—make precision washers, gaskets and fine metal stampings. We fabricate, automatically and continuously, flat materials in roll form, including metal, cork, composition, plastics, paper, board, cloth, leatherette, etc.

We have the equipment and the experience to work to the closest tolerances in gumming, punching, die-cutting. We have automatic equipment for printing (2 colors), embossing and die-cutting in one continuous operation. We have a staff of highly skilled tool and die-makers, men who combine fine craftsmanship with exacting precision.

We are doing our share in national defense with all of these facilities—under direct and sub-contracts. We are at the service of any firm or government agency engaged in the defense effort.

★ ★ ★

RICHARD M. KRAUSE

Printers and Fabricators of Sheet Materials

52 East 19th Street - New York City



They Come Up Smiling -

1. PAPER PLATES

Dust excluding, white Nashua M. G. Tissue retained by edge band.

2. CANDY BOX

Holiday Band — 3 color printing on embossed Nashua Coated Paper.

3. BLOSSOM SPORT BRIEFS

3 color printing on colored Nashua Mica Paper matching fabric — with die cut opening to show fabric.

4. BABY PAD

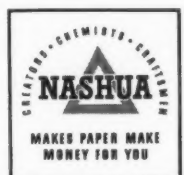
2 color printing on white strong bond.

These products, and many others formerly cellophane-wrapped or banded, have put on their "service uniform"—and the sales-appeal is still there. Out of Nashua's experience over a broad range of packaging materials comes the ability and resourcefulness to meet the contingencies of the times. Making the best of what is available is living up to NASHUA's slogan—"Makes Paper Make Money for You."

For all those industries where its use is permitted, we are producing Printed Cellophane Wrappers. Also, Converted Glassine Wrappers. If you have a packaging problem, emergency or otherwise, we are ready to serve you.

NASHUA GUMMED and COATED PAPER COMPANY
DEPT. M-3, NASHUA, NEW HAMPSHIRE

★ BUY U. S. DEFENSE BONDS ★



MODERN PACKAGING

MARCH 1942

VOLUME 15

NUMBER 7



WIDE WORLD

Will standardization kill individuality?

Standardization is here. Military needs have brought it on the run. The Bureau of Standards recommends standardized sizes of tin cans and glass containers. Manufacturers of various types of paper are requested to standardize on fewer grades and kinds. Uses of various metals and plastics are rigidly prescribed and limited. Some of the controls are already mandatory; some of the recommendations and requests tomorrow may be. Standardization is a matter of stern necessity.

Even before any necessity developed or before a war emergency put in its appearance, the advantages of standardization were being preached by government experts and consumer advocates, sometimes without consideration for the manufacturer or producer, but almost invariably with a valid basis of consumer convenience or materials conservation.

Today the latter point is giving a tremendous urge to all standardization proposals and, with amazing unanimity, the designer, maker and user of packages are getting into step and doing their share towards bringing victory nearer.

The question naturally arises—how will standardization affect packaging? First, it will affect structure and materials. Will it of necessity be carried far enough to endanger—perhaps kill—individuality? That question inevitably has a three-fold application: (a) adaptation to current shortages, (b) full cooperation with all war effort and (c) planning for post-war merchandising activities.

As yet, the consumer has had little occasion to notice wars' effects on packages, although here and there are scattered instances of rather significant changes. Because of the long lag between production and ultimate consumption, it may be





some time before Mrs. John Smith and her family are aware of the fact that cheese, confectionery and cleansing creams are arriving in different dress than formerly. Jobbers and retailers are almost in the same boat, but the purchasing agent in the manufacturer's plant, the paper converter, the lithographer, the glass maker—these all are too familiar with the statement, "You can't get that now!" And the well informed designer is planning packages in the light of what pigments and what materials may be available six months or a year from now.

What are these three—designer, maker and user of packages—thinking about the question posed by the title of this article? Modern Packaging asked them and the responses are convincing evidence that they are all thinking very seriously about the problem from many points of view. It may be true that some package users have not as yet felt the full force of shortages; it may be that some makers and suppliers of package material think that the status quo of today's regulations may be preserved; there may be some warrant for a defiant questioning of the legality of some of the controls—none of these things, however, is evident in the letters received in answer to our request for opinions on this subject. All show a complete realization of the far reaching importance of the question. But let the excerpts from their letters, which follow, tell the story.

From package designers

Lawrence Blazey, Secretary, Designers for Industry: "I think we all agree that most food packages carry too much boisterous color, jumbled copy and mediocrity. These certainly could stand improvement to present greater simplicity in color pattern on the dealers' shelves as well as in the housewives' cupboards.

"Since cellophane in the past has been stretched to include in its protection all manner of things, many of which are not indigenous to it, we will be required to eliminate all uses except for cleanliness, moisture proofing and visibility. As a substitute for visibility, we can use a colored photo reproduction of the product on suitable wrapping or return to the use of waxed glassine papers. Even glass containers will do if cost is not out of line.

"We are designing containers, using various forms of pulp that can be molded with a plasticizer. By molding common excelsior with a polymerizing solution, we can form shallow

shapes with a rough textured surface useful for many products where metal or phenolics formerly were used. By affixing a smart colorful label, a decided contrast and ready identification is achieved. Other materials practical for this same process are: ground nut shells, colloidal clays, sawdust and other wood wastes.

"We know of the development of a machine whereby four-color printing can be applied automatically to bottles, cans, jars, etc., as it passes through the machine. This eliminates gummed label printing and is much faster at one-half the cost. Containers for re-use can be printed in washable inks to eliminate hand sorting."

Frank Condon: "Many, if not most, businesses, could be helped (especially today) by some degree of package standardization. It would be unfortunate if effort in this direction were discouraged through a fear of loss of individual package identification.

"The benefits of standardization are many. In addition to the obvious merchandising advantages of a unified group of packages, there are the resulting savings in combining orders for materials, manufacturing and printing. Also, savings in time spent in purchasing, records, inventory, keeping of stocks packing, etc.

"Standardization, by its very nature, does result in a loss of individuality. However, as this loss can be controlled, it is far from necessary to sacrifice individuality.

"The real problem is to secure the benefits of standardization without a harmful loss of individuality.

"Design or color, or construction, or materials, or all of these can be standardized. Either design or color, with or without both of the other factors, can be standardized safely enough. But, if a standard should be set for both design and color, we should have something to worry about!"

Joseph B. Federico: "While on the surface the problem seems insurmountable, it ultimately will lead to as much diversification as at present. There is no reason why standardization should kill individuality. You can give ten designers the same problem and material and they will come back with ten different answers. However, standardization means that the problem of designing a package will place more emphasis on the resourcefulness of the designer.

"We are working on some ideas (not yet ready for publication) trying to eliminate as much material as we can. We also believe that packaging, like products, will be simplified a



Group of packages, widely varying in shape and materials with design standardized by brand name and trade mark, yet highly individualized. Such a unit is a decided advantage from a merchandising standpoint and also represents savings in combining orders for materials, manufacturing and printing as well as considerable labor for inventory, stock-taking, packing, etc. Designs by Frank Condon.

great deal at the present. In many fields, the problem of merchandising has been crowded out by the problem of availability."

Frederic S. Grover: "Standardization should not and need not destroy individuality in package design. All manner of products are undergoing a change of structure and appearance through replacement of strategic materials by those not required for war production. These changes are being accomplished with a measure of success which might have seemed quite impossible until forced to do them by necessity.

"It is found, for example, that entirely satisfactory and pleasing effects can be achieved with finishing material replacing many we had come to believe indispensable, such as chromium plate, nickel silver, aluminum and bronze pigmented lacquers, etc. The change-over is resulting in no loss of individuality and, while the products may be less brilliant, they are taking on a new and seemingly very substantial character."

Lucille Knoche: "Whether standardization will kill individuality depends on how far standardization is carried, how much of it is a real necessity to the war effort. If it is a political wedge designed, through a temporary war necessity, to lever us into a final government controlled, vote controlled economy—then, I think individual effort in many fields will be a non-essential commodity.

"On the other hand, in discussing present restrictions in our own field—and those to come—it is true that limitations often function as an incentive to inventiveness. This is true in any field where imagination is allowed too wide a choice of directions to follow. As an example, many artists make use of too many colors in a specific work. While yellow is a very fine color, perhaps we can develop, without it, color schemes that are interesting and different. The sad thing would be to be told that we must use red for drugs, blue for merchandise, pink for cosmetics—or some such regimentary idea.

"To be limited as to sizes and shapes of containers, to al-



low the use of molds, materials, machines and time to be allotted to war work, is not too hard to swallow. There are still many other ways of identifying a package—trade marks, color, ribbons and many little bibelots of like nature. We might be propelled into the use of materials not yet thought of in relation to packaging.

"Perhaps we shall have to cut down on the great variety of articles and preparations that are poured into the markets. This cannot be regarded as too terribly sad—we may be the better for the purge. I have a great respect for American inventiveness in business, in creative fields, the arts and sciences. Let us examine every step and give our considered opinion—to win the war-for-freedom, without losing any essential freedom, now or later, of our own.

"There are many markets as yet unexplored for materials. Many new materials and devices were born of the last war. Undoubtedly it will be true again—anyway, mankind has always wrapped its goods in something and will continue to do so. Our ingenuity circumvents many a useless rule, fills in many a lack.

"I am not, by nature, a Pollyanna—rather, I incline a little enjoyably toward the pessimistic, but I would prefer to regard this very real situation as a challenge to our ability. But we'll have to get up before dawn."

Ben Koodin: "Hasn't this problem been with us, always? By utilizing simple forms and clever constructions, the competent package designer has always been able to take stock containers and by well-planned design surround them with individuality. He has always been able to work with what was available and produce successful results.



Stock bottle widely used, to which undeniable personality has been imparted. Labels were formerly printed in four colors, now appear in two; neckbands and medallions are printed in one color. Result: vastly improved appearance of bottle at lower cost. Design by Georges Wilmet.

"We believe that the present emergency will accent the services of the experienced designer. An example of our efforts along this line is the "Miro" line of drinking straws. With an eye to the national emergency, this line, considered a necessary accommodation item by the Miro Paper Products Corp., was reproduced on the least expensive type of patent-coated stock available, displacing the dust-proof dispenser made of metal, which is so vital to defense production."

Ben Nash: "As I see this subject, I believe that it will be 'Simplification' and not 'Standardization' which will strongly influence the future packaging developments.

"Some standardization will, no doubt, take place but this will come about as an expression of the major objective—simplification. If one stops to consider simplification as the packaging objective, it is most apparent that ingenuity and individualism will have a very wide opportunity. Each package maker or package designer will seek simplification in unlimited individual ways. The job of simplification will be a vital stimulant to individuality in creative and inventive effort in designing, in materials and in manufacture.

"Some efforts towards simplification will use standardization to achieve their ends. We are apt to see producers of civilian commodities using standard bottle shapes and molds instead of designing new bottle designs, but this use of a standard bottle contour will be supplemented with individuality in the labeling, closures or other applied parts.

"Under the definite 'competitive' concept in American mer-

chandising, it is almost a certainty that any standardization of one part of a package will be offset by some stroke of individuality to create a competitive distinctiveness. The American merchandiser knows too well the selling power in having a competitive distinction to his packaged product and also the disadvantage he would have in putting out a run-of-mill product which was on equal terms with many of his competitors.

"While the various restrictions in materials for civilian commodities will increase as the war continues, the American manufacturer will not discard his skill for making the best out of little. The American manufacturer has spent the past 35 years in educating the American public to expect more in America than in any other country in the world.

"The American consumer will keep packaging in America from going back to the cracker barrel; and, if it has to be a cracker barrel, it will be an ingenious and individualistic cracker barrel, designed to attract competitively consumer purchasers.

"As I see it, the packaging of American products in the future is going to be more appropriate, more economical and more efficient than anything we have ever known in the past. Out of the many packaging developments and merchandising uses of packagings during the past 15 years, we will draw those methods which are essential and for which materials may be secured for civilian commodities."

James Harley Nash: "Standardization is merely another limitation to the package designer. Packages that lacked character and individuality in color will be worse off in black and white. Good package designs do not depend on color. Limitations in shape should not be a hardship in packages because, with the exception of specialties, this has always been the case. The type of products we have worked on in the past, for economical reasons, were all orthodox shapes, the same as all our competitors. Frills and gadgets are not our specialty.

"Individuality and character in design are limited only by the designer's imagination and ability. There are as many styles of handwriting as there are people. There are volumes on different type faces. Any one who has ever played bridge realizes the variety of combinations possible with 52 cards, consisting of four suits, divided into four hands.

"Standardization will make the errors of the past more pronounced. To use color extravagantly is like drawing a red herring across the trail. This subterfuge must give way to sound designing. The manufacturer who has had a good trade mark or a distinctive package in the past will profit. The manufacturer who has depended on color will suffer.

"You ask what we are doing about it. This is simple. We are making four color jobs in two; we are applying good designs of the past to new shapes where necessary; we will not be alarmed if we are forced to use one color.

"I have always considered color as an adjective, not a noun. If you were to ask some one to buy the Socony Red, they would be confused. If you were to ask them to buy the Socony Flying Red Horse, they would know exactly what you meant. We need more nouns in package design and less adjectives."

Martin Ullman: "Yes, 'packaging must go on,' and it can in accordance with the WPB recommendations, but, if one follows these without proper interpretations and takes the path of least resistance, the end of the road is bulk packaging and bundling of goods.

"Packages, as you are well aware, have been elaborate and wasteful of material. The accent had been on surface decora-

tion and even today—in wartime—the problem appears to many to be concentrated in a printing job in which one color will be substituted for two or more.

"The civilian goods manufacturer, to whom an effective package is important, is being pinched by inadequate supplies and he is concerned over a sharp rise in container prices. His problem is (a) how far his package can be redesigned so as to make better use of available materials and production equipment; and (b) how to redesign his package so that he stays within his ratio of package cost to product production cost.

"The problem can get so complex that there is an impulse to do nothing. But a number of American firms, I know of, have taken the pains to investigate and out of it specific improvements and savings are taking place in their packaging:

"For instance: A savings is being effected in paperboard through redesign for a toothbrush carton to use less board. In this instance sanitary protection is given to the bristles, the handle is exposed for immediate color identity and board conservation amounts to over 600 per cent, but more important, supplies can be obtained closer to the source of production at one-third the price paid for pre-war cartons.

"Another instance: An underwear manufacturer who had been using a cellophane wrapped package, standard in the trade, could have gone back to bulk packing when cellophane was banned. His brand will be appearing shortly in a package which uses paper with the greatest economy as the base material, but its package construction is different from competitive lines so that on a dealer's shelf, package shape gives identity to product and brand. More important, his new type packaging will help to avoid spoilage and 'mark downs.' His change-over from one material to another brought with it a merchandising improvement—the package is now a carrier of three garments instead of one and, in effect, is a promoter of a three-unit sale.

"In my opinion, package standardization could easily kill product individuality. The answer is not in substituting one material for another but will have to come through ingenuity and original ideas for the packaging of a product.

"Shortages are going to mean exercising ingenuity to devise substitute packages. The problem is one of keeping competitive items on a competitive basis and this means *adaptation within cost limits*. Attention will be focused on package crea-

tions which are made to secure economy in the use of materials by intelligent adaptation and technical ingenuity. Otherwise there is a good possibility that American manufacturers will have to discontinue profit-making items of the past because of an inability to obtain container materials.

"In many ways the rationing of materials and standardization of specifications will offer manufacturers the greatest opportunity they ever had of starting again from scratch—of giving their packages a complete overhauling. Such an overhauling would naturally include their selling and merchandising technique. However, hide-bound traditions, pet prejudices and obsolete hereditary ideas will go by the boards.

"Out of the troublesome substitution problem facing the American manufacturer of packaged products, he will find that better package creation can be advantageously employed (a) to avoid standardization for his brand and (b) to avoid giving consumers the impression that the product has deteriorated with the cheaper package."

Leonard Arthur Wheeler, Allied Advertising Artists: "The great bulk of staple products, foods and drugs will be little affected by standardization in our opinion. There will and already have been some changes in types of packaging, but identity need not be lost. Rather, it is a challenge to the designer's ingenuity to make necessary change-overs with the least possible disturbance of optical values.

"Changes in container types and features, closures, applicators and so on, if properly presented to the consumer, will gain his or her support and cooperation. This is a problem of merchandising and advertising, a problem of turning apparent liabilities into possible assets.

"Our principle emphasis to clients in the West has been to encourage larger retail units to the end that materials might be saved for national defense and economies passed on to the consumer. Estimated savings up to 33 per cent would be effected by such a program. Much less material would be used to make one large package than two or three smaller ones, and, all down the line of production and handling, continuing economies would be produced. Another possibility is that with larger units standardization need not be such a bug-a-boo as it was formerly."

Georges Wilmet: "There is no reason why standardization should kill individuality. Undoubtedly the appearance of many packages will suffer during the war period. This,

Shortages of chrome and silver were anticipated when this package was redesigned. Formerly made in blue, yellow and silver, now in one color only. The new, simple design has strong recognition value. Design by Georges Wilmet.



however, will not necessarily be caused by restrictions or priorities, but rather by a fundamental lack of understanding of the problem.

"The present situation is calling for simplifications and economies. But this in itself is now new, for it has always been the designer's job to accomplish just that—to create the greatest appeal at the lowest cost.

"Emergency conditions may possibly have a healthy effect on packaging in general, because there are still many packages which are poorly and extravagantly designed. Often in the attempt to produce something new or outstanding, the sound principles of design are neglected. Package individuality is never the result of overdressing on an unlimited budget. Rather, it is, theoretically, an expression of the true character of the product in the simplest and most attractive manner possible.

"Simplification of packaging is not so easy as it sounds. Besides a fundamental knowledge of design principles, it calls for a fine appreciation of the potentialities inherent in the product, combined with a practical understanding of the merchandising problems it must face.

"Lately, for example, a great deal of money has been expended in the designing of wine packages and all sorts of atrociously shaped bottles have been produced in a vain striving for individuality. But this could have been accomplished much better by the use of stock wine containers, of which the supply is abundant and the design excellent. It would have been sufficient to rely on an appropriate label, which, in itself, can carry all the distinction and individuality the product merits.

"Package design today does not require more thought than it did before; it does require, as it always has, a clearness of perception beyond the conventional."

From package manufacturers

M. Stewart Ireys, Manager Sales Promotion and Package Merchandising Dept., Armstrong Cork Co.: "Since we are at war and the destiny of our war efforts lies in the hands of the military, 'industrial effort' is necessarily geared to meet such requirements. Likewise, civilian or individual effort is utilized to serve (1) the military, (2) industrial requirements which serve the military and (3) maintenance of public welfare and civilian defense.

"It also seems to me that the whole subject of packaging, as we have known it, is a means of gaining greater acceptance and distribution for merchandise in the interests of the individual manufacturer. Since such a system naturally conflicts with the interests of military requirements under wartime conditions, a serious dislocation in merchandising by means of packaging must necessarily take place. Instead, merchandise is now distributed for military requirements and in the interests of public health and general welfare.

"How such a picture leaves room for very much individuality in the package is an open question. On a long range program packaging must go on and a return to normalcy in a post-war era is most desirable. However, as of today, it seems to me that we are living in an era of military necessity which automatically precludes much of packaging's individualistic characteristics."

A. J. Harris, General Manager, The Cin-Made Corp.: "Government orders must get the Green Light and in order to conserve raw materials for civilian use, standardization is necessary, but whether or not it will kill individuality, we do not know.

"We are endeavoring to suggest changes to our customers on

both essential and non-essential packaging for civilian use with the thought in mind of conserving raw materials. I believe the individual names of products required for civilian use must be constantly kept before the public regardless of any change in packaging, because as a free enterprise, we will again go back to democratic individualism.

"We are facing a metal situation now, but until we can learn of the full restrictions, we must more or less run our business on a day-to-day basis. Possibly we could offer many styles of all-fibre cans to replace either all-metal or metal-end cans, but the paper and paperboard situation seems to be almost as bad as metals. In other words, we are prepared for an allocation system which places first, the government requirements, second, essential to civilian use, and last, non-essentials."

Richard M. Krause, Sr., Richard M. Krause, Inc.: "Our inability to procure metal surfaced papers was hard to bear as we had specialized on almost 40 per cent of our entire output in metal foils. Since substitutions came in lead surfaced finishes, further difficulties have come with inks which did not print with solidity and depth of color by reason of poor base.

"We are experimenting with rayon printing in multicolors and embossing, using specially prepared inks warranting permanent coloration. We are bending all efforts to use our facilities to help our customers meet the shortage situation, feeling that when it is over beautiful labels will come back."

Arthur W. Brockway, Vice-President, Muirson Label Co., Inc.: "The manufacturers of canned goods labels have, for years, been compelled to become standardized in the production of labels. First, in the standardization of the sizes of cans, which now, probably, will be further standardized due to elimination of odd sizes; secondly, due to standardization of colors, in order to run combination sheets. Also further standardization required by food law regulations, as to what is required to appear on the label and where.

"In spite of all previous standardization as to sizes, colors and legal requirements, the artists have been very ingenious in their ability to produce many different effects and combinations to make labels distinctive and attractive. Even if further restrictions are necessary as to color, size of cans, etc., we believe that the canner or distributor can still maintain his trade mark identity and good will for his package and products."

From package users

E. D. Weeks, General Manager, The Armand Co.: "In our opinion, standardization of packaging will never kill the individuality of the complete product. It will hurt those who put an inferior product into the container; it will aid those who put a superior product into the container."

I. Willard Crull, President, Campana Sales Co.: "We have not had to meet this question seriously until just recently, and, frankly, we are in the throes right now of trying to work out ways and means to achieve a measure of individuality and still stay within the confines of the restrictions that are being imposed.

"Providing there is a measure of freedom permitted to use the materials that are still available, in an individual way, standardization should not kill individuality. However, when plastics are available but new molds are not available, it does serve to kill individuality. The same is true of bottles. Glass, presumably, is plentiful, but if we must use a standardized design bottle, such as is used by everyone else, it certainly limits the application of the available material to a point where it is extremely difficult, if not impossible, to achieve any worthwhile measure (Continued on page 94)

WPB TIN ORDER

Conservation Order M-81, issued February 11, provides carte blanche on tin cans for canning fruits and vegetables of primary importance, on which the Department of Agriculture has set production goals and which must be canned promptly to avoid spoilage. Fruits and vegetables of secondary importance, in general, will be given as much tinplate as was used to pack 100 per cent of their 1940 pack. Some of these products can be dried. Important medical, dental and industrial products will be limited to 100 per cent of 1940. Cans for products which are non-essential from a primary defense standpoint will be cut 50 per cent for the remainder of February, then discontinued entirely. Among products affected are beer, dog food, dried beans of all kinds (including pork and beans), baking powder, cereals and flour, petroleum products, spices and condiments, and tobacco. Small-sized cans will be eliminated, which will result in estimated savings of 7 per cent. Fruits and vegetables for the most part will be packed in Nos. 2, 2½ and 10 cans.

Concurrently, the WPB issued Preference Rating Order No. P-115 granting high priority ratings to canners for repairs, maintenance and expansions to enable the canners to pack the fruits and vegetables provided for in M-81. A rating of A-1-a—the highest possible—is granted for emergency repairs to avert spoilage of fruit or vegetables. Because of its vital importance to the entire packaging industry, Modern Packaging reprints the new tin order in its entirety.

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Part 1068.1—TINPLATE AND TERNEPLATE CONSERVATION ORDER M-81

TO CONSERVE THE SUPPLY AND DIRECT THE DISTRIBUTION OF TINPLATE AND TERNEPLATE

WHEREAS, it appears that the fulfillment of requirements for the defense of the United States will result in a shortage of tinplate and terneplate for defense, private account, and for export, and it being necessary in the public interest and to promote the national defense to conserve the supply and direct the distribution of tinplate and terneplate in the manner and to the extent hereinafter in this Order provided:

NOW, THEREFORE, IT IS HEREBY ORDERED:

1068.1—CONSERVATION ORDER NO. M-81

(a) Applicability of Priorities Regulation No. 1. This Order and all transactions affected thereby are subject to the provisions of Priorities Regulation No. 1 (Part 944) as amended from time to time, except to the extent that any provision hereof may be inconsistent therewith, in which case the provisions of this Order shall govern.

(b) Definitions.

- (1) "Person" means any individual, partnership, association, business trust, corporation, governmental corporation or agency, or any organized group of persons, whether incorporated or not.
- (2) "Tinplate" means blackplate coated on one or both sides with tin.
- (3) "Terneplate" means blackplate coated on one or both sides with a lead-tin alloy.
- (4) "Blackplate" means any sheet steel plate suitable for manufacture into a container, and, for the purpose of this Order, shall also include any waste tinplate, terneplate, or scrap produced in the ordinary course of manufacturing cans out of tinplate or terneplate.
- (5) "Can" means any container which is intended for packing, packaging or putting up products of any kind and which is made, in whole or in part, of tinplate, terneplate, or blackplate, or any combination thereof, and includes closures, crowns and caps, but does not include any closure, crown or cap to be used on, or as a part of, a non-metal container.
- (6) "A Primary Products Can" means a can used to pack any product listed on Table I, annexed hereto, such products being foodstuffs of primary importance.
- (7) "A Secondary Products Can" means a can used to pack any product listed on Table II, annexed hereto, such products being foodstuffs of secondary importance.
- (8) "A Special Products Can" means a can used to pack any product listed on Table III, annexed hereto, being mainly important medical, industrial, pharmaceutical, chemical, dental, and miscellaneous supplies.
- (9) "A Non-Essential Can" means any can made of tinplate or terneplate other than those defined in subparagraphs (6), (7) and (8) above.
- (10) "A Canner" means any person engaged in the business of packing, packaging or putting up in cans any food or other products of any kind for sale to others, whether such person buys some or all of his cans from third parties or whether he manufactures some or all of his cans himself.
- (11) "A Can Manufacturer" means any person engaged in the business of producing cans for sale to others or for his own use in packing food or other products of any kind.
- (12) "Base Period" means the corresponding period of 1940.

- (13) "Inventory" of a person includes the inventory of affiliates and subsidiaries of such person, and the inventory of others where such inventory is under the control of or under common control with or available for the use of such person.

(c) Restrictions Upon the Manufacture, Sale and Delivery of Cans and Upon the Use of Cans for Packing.

(1) Use of Blackplate in the Manufacture of Cans.

Until further order by the Director of Industry Operations, there shall be no restriction upon the use of blackplate in the manufacture of cans or upon the sale or delivery of cans made wholly of blackplate or partly of blackplate and partly of some material other than tinplate or terneplate.

(2) Primary Products Cans and Special Products Cans.

Until further order by the Director of Industry Operations, there shall be no restriction upon the manufacture, sale or delivery of Primary Products Cans or Special Products Cans except (a) the restrictions imposed by paragraph (d) of this Order and (b) the restrictions imposed by Tables I and III (in respect of the particular products there listed) relating to permitted can sizes, can material, and extent of production.

No can manufacturer shall manufacture, sell or deliver during the period from the date of issuance of this Order to December 31, 1942, any primary products or special products cans except under contracts or orders validated by delivery to such can manufacturer of a canner's certificate as set out in subparagraph (5) of this paragraph (c).

(3) Secondary Products Cans.

No canner shall buy, accept delivery of, manufacture, or use for packing during the period from the date of issuance of this Order to December 31, 1942, secondary products cans requiring more than 100% of the tin and/or tinplate and/or terneplate required for secondary products cans which he bought, accepted delivery of, manufactured, or used for packing during the base period.

No can manufacturer shall manufacture, sell or deliver during the period from the date of issuance of this Order to December 31, 1942, any secondary products cans except under contracts or orders validated by delivery to such can manufacturer of a canner's certificate as set out in subparagraph (5) of this paragraph (c).

In addition to the restrictions on secondary products cans imposed by this subparagraph (3) of paragraph (c), all can manufacturers and canners shall observe the restrictions imposed by Table II (in respect to the particular products there listed) relating to permitted can sizes, can material, and extent of production.

(4) Non-Essential Cans.

No canner shall buy, accept delivery of, manufacture or use for packing during the period from the date of issuance of this Order to March 1, 1942, non-essential cans requiring more than 50% of the tin and/or tinplate and/or terneplate required for non-essential cans which he bought, accepted delivery of, manufactured, or used for packing during the base period; and after March 1, 1942, no canner shall buy, accept delivery of, manufacture, or use for packing any non-essential cans except to the extent permitted by paragraph (e) and paragraph (g)(1) of this Order.

No can manufacturer shall manufacture, sell or deliver during the period from the date of issuance of this Order to March 1, 1942, any non-essential cans except under contracts or orders validated by delivery to such can manufacturer of a canner's certificate as set out in subparagraph (5) of this paragraph (c); and after March 1, 1942, no can manufacturer shall manufacture, sell or deliver any non-essential cans except to the extent permitted by paragraph (e) and paragraph (g)(1) of this Order.

(5) Certificates and Reports Relating to All the Kinds of Cans Covered by this Order.

(i) Certificates. Each canner who purchases any cans pursuant to this paragraph (c)—whether such purchase is by contract or on open-account-order—shall furnish to the can manufacturer from whom he buys a certificate, manually signed by an authorized official, in substantially the form attached hereto as "Exhibit A," which shall constitute a certification to the War Production Board that such canner is familiar with the terms of this Order (in its present form or as it may be amended from time to time) and that, during the life of this Order, he will not use any cans purchased from such can manufacturer in violation of its terms. Only one such certificate covering all present and future purchases from a given can manufacturer, need be furnished by a canner to that can manufacturer, but no can manufacturer shall be entitled to rely on any such certificate if he knows, or has reason to believe, it to be false.

(ii) Reports. Each can manufacturer and each canner shall file such reports as the War Production Board may prescribe for the purpose of effective administration of this Order.

(6) Transfers. No product which has been packed in a can made of tinplate or terneplate shall be repacked by the same or a different canner in the same or different form, with or without other products, in another can made of tinplate or terneplate, except to the extent specifically permitted by Tables I, II, or III.

(d) Further Conservation of Tinplate and Terneplate.

(1) All manufacturers of all the kinds of cans covered by this Order shall cooperate with the tinplate mills in effectuating as rapidly and as completely as possible, a program of reducing the thickness of the tinplate coating on such cans—both by hot dip coating and by electrolytic coating—to the minimum thickness which will be sufficient for satisfactory packing of the particular product packed. After the date of issuance of this Order, no can manufacturer or canner shall order from a tinplate mill and no tinplate mill shall manufacture, sell or deliver any tinplate with a coating of a pot-yield thickness greater than 1.25 lbs. per base box (i.e., 31,360 square inches), and no can manufacturer or canner shall manufacture, sell or deliver any tinplate cans with a coating of greater than such thickness; provided that neither this prohibition nor the prohibition of Supplementary Order M-21-e (Section 962.6) shall apply (a) to tinplate or to cans made of tinplate already manufactured at the date of issuance of this Order or (b), notwithstanding the provisions of said Supplementary Order M-21-e, to cans used to pack any product which is listed on "Exhibit B" annexed hereto, and for which a tinplate coating of a pot-yield thickness of 1.5 lbs. per base box is hereby authorized.

(2) All manufacturers of all kinds of cans covered by this Order and all cannery packing products in such cans are ordered (a) to concentrate to the greatest extent practicable upon the larger-size cans and to manufacture and to use for canning, respectively, as high a proportion of larger-size cans—as compared with smaller-size cans—as may be feasible and practicable; (b) to substitute, for cans made of tinplate or terneplate, containers made of other material to the extent that such substitution may be feasible and practicable; and (c) to use a minimum amount of solder having the minimum tin content necessary for manufacture and use of the tinplate and terneplate cans permitted to be manufactured and used under this Order.

(3) No person who in 1941 packed a portion of his products in any container made of material other than tinplate or terneplate shall increase the proportion of such products hereafter packed in tinplate or terneplate.

(e) Limitations on Inventory.

(1) After the date of issuance of this Order, no can manufacturer or canner shall order from the steel mills any tinplate or terneplate to be used for the manufacture of

non-essential cans in excess of the amounts necessary and allowed by this Order—taking into account existing inventory—for the manufacture of non-essential cans during the period from the date when this Order is issued to March 1, 1942. All can manufacturers and cannery shall immediately cancel any existing orders for tinplate or terneplate in excess of such amounts.

(2) After March 1, 1942, no can manufacturer or canner shall manufacture, and no can manufacturer shall sell to a canner, any non-essential cans made from tinplate or terneplate held in the inventory of such manufacturer or canner on March 1, 1942, except to the extent permitted by the War Production Board on the basis of an application showing that any other use of such tinplate or terneplate or cans made from such tinplate or terneplate will be unduly or unnecessarily wasteful or wholly impracticable.

(3) After March 1, 1942, no can manufacturer shall sell to a canner, and no canner shall use for packing, any non-essential cans manufactured prior to March 1, 1942, except to the extent permitted by the War Production Board on the basis of an application showing that any other use of such cans will be unduly or unnecessarily wasteful or wholly impracticable.

(f) Tables I, II, and III. If any general provision or restriction of this Order conflicts, or appears to conflict, with any specific provision or restriction of Tables I, II or III, then such specific provision or restriction shall control.

(g) Miscellaneous Provisions

(1) Applicability of Order. The provisions and restrictions of this Order shall apply to tinplate, terneplate and cans made of tinplate or terneplate which have already been manufactured as of the date of issuance of this Order or which may hereafter be manufactured—irrespective of whether such tinplate, terneplate, and cans were, or will be, manufactured pursuant to a contract made prior or subsequent to the date of such issuance; provided, however, that this Order shall not apply to tinplate, terneplate, or cans made of tinplate or terneplate manufactured or to be manufactured pursuant to a Defense Order supported by a Preference Rating of higher than A-2.

(2) Appeal. Any person affected by this Order who considers that compliance therewith would work an exceptional and unreasonable hardship upon him, or that it would result in a degree of unemployment which would be unreasonably disproportionate compared with the amount of tinplate and terneplate conserved, or that compliance with this Order would disrupt or impair a program of conversion from non-defense work to defense work, may appeal to the War Production Board on form PD-269, Ref: M-81, setting forth the pertinent facts and the reason he considers he is entitled to relief. The Director of Industry Operations may thereupon take such action as he deems appropriate.

(3) Violation. Any person who wilfully violates any provision of this Order, or who by any act or omission falsifies records to be kept or information to be furnished pursuant to this Order, may be prohibited from receiving further deliveries of any Material subject to allocation, and such further action may be taken as is deemed appropriate, including a recommendation for prosecution under Section 35(A) of the Criminal Code (18 U.S.C. 80).

(4) Sales of Tinplate and Terneplate. No person shall hereafter sell or deliver tinplate or terneplate to any can manufacturer or canner if he knows, or has any reason to believe, that such tinplate or terneplate is to be used in violation of the terms of this Order.

(5) Communications to War Production Board. All reports required to be filed hereunder and all communications concerning this Order, shall, unless otherwise directed, be addressed to:

"War Production Board
Washington, D. C. Ref: M-81."

(6) Effective Date. This Order shall take effect immediately, and shall continue in force until amended or terminated by the Director of Industry Operations. The telegraphic order, dated January 27, 1942, to can manufacturers is hereby revoked.

(P.D. Reg. 1, amended Dec. 23, 1941, 6 F.R. 6680; W.P.B. Reg. 1, Jan. 26, 1942, 7 F.R. 561; E.O. 9024, Jan. 16, 1942, 7 F.R. 329; E.O. 9040, Jan. 24, 1942, 7 F.R. 527; sec. 2(a), Public No. 671, 76th Congress, Third Session, as amended by Public No. 89, 77th Congress, First Session.)

Issued this 11th day of February, 1942.

J. S. Knowlson, Director of Industry Operations

EXHIBIT B

1. Sauerkraut. 2. Pureed Vegetables and Fruits. 3. Berries, including but not limited to blueberries, blackberries, cranberries, raspberries, strawberries, and loganberries. 4. Cherries. 5. Plums. 6. Prunes. 7. Lemon Juice. 8. Phenols and Cresols. 9. Glycerine (C.P. and U.S.P.). 10. Jams, Jellies, and Preserves (if authorized to be packed). 11. Pectin. 12. Nicotinic Sulphate. 13. Pickles.

TABLE I—PRIMARY PRODUCTS CANS

All the individual restrictions appearing on this Table, relating to can sizes, repacking, or specific limitations on the form in which a product may be packed, shall take effect as of March 1, 1942, unless otherwise indicated.

FRUITS

1. Fruit Cocktail, and Fruits for Salad, including any combination of fruits otherwise included on Table I and Table II, but containing at least 50% fruits on Table I, and only in No. 1 Tall, No. 2, No. 2½, or No. 10 cans. Said Fruit Cocktail and Fruits for Salad are not to be packed from contents of other tinplate cans except to the extent of 10% by weight of said Fruit Cocktail or Fruits for Salad and in no case except where such 10% by weight consists of Pineapple or Maraschino Type Cherries which have come from No. 10 or larger cans.
2. Peaches, Clingstone, and Pears, Halves, Segments, Slices, only in No. 2, No. 2½, or No. 10 cans. Whole Peaches and Whole Pears not to be packed.
3. Pectin, Dry and Liquid, only in 5-gal. or larger cans.
4. Grapefruit, Lemon, Lime, Orange Concentrates, including but not limited to dry, powdered, dehydrated juices from the same fruits, with or without drying promoters, but only in No. 1 Picnic or larger cans.
5. Peaches, Freestone, only in No. 2, No. 2½, or No. 10 cans, except in California for which see Table II.

VEGETABLES

1. Asparagus, only in No. 2, No. 2½, No. 10, No. 1 Square, or No. 2½ Square cans.
2. Beans, packed fresh, including but not limited to Green, Wax, Fresh Shelled, Lima, and Green Soybeans, and only in No. 2, No. 2½, or No. 10 cans. Dried beans and peas are not to be packed.
3. Corn, only sweet, cut, and only in No. 2 or No. 10 cans; or in No. 2 Vacuum cans, dry pack only. Corn on cob not to be packed.
4. Peas, only fresh green, and only in No. 2 or No. 10 cans.
5. Tomatoes, only in No. 2, No. 2½, or No. 10 cans.
6. Tomato Paste, Sauce, Catsup, Chili Sauce, only in No. 10 or larger cans. See Table II.
7. Tomato Pulp or Puree, in No. 1 Picnic, No. 2, No. 2½, No. 10, or 5-gal. cans. The foregoing Tomato products packed in 5-gal. or larger cans may be re-packed in other tinplate cans either unchanged or in combination with other products.
8. Baby Foods—Vegetable Purees, and Chopped Foods (for Human Consumption only), but only if packed for these purposes in 1941; and only in No. 202 B. F. (202 x 214), No. 211 B. F. (211 x 210), No. 2, or No. 10 cans.

In respect of the following products above-listed on this Table I, under the heading of "Vegetables," being respectively Green and Wax Beans, Corn, Peas, and Tomatoes (Item 5), a canner who lacks adequate machinery, equipment or plant facilities for packing his entire 1942 pack of such products in No. 2, No. 2½, or No. 10 cans may, upon application to the War Production Board, pack the excess of his 1942 pack of such products in No. 303 cans, if said canner is currently equipped to pack such products in No. 303 cans and did so in 1941.

JUICES

1. Tomato Juice (which may contain up to 30% of other vegetable juices), only in No. 2, No. 2 Cyl., No. 3 Cyl., or No. 10 cans.

In respect of Tomato Juice, a canner who lacks adequate machinery, equipment or plant facilities for packing his entire 1942 pack of such product in No. 2, No. 3 Cyl., or No. 10 cans may, upon application to the War Production Board, pack the excess of his 1942 pack of such product in No. 211 Cyl., or No. 300 cans, if said canner is currently equipped to pack such product in No. 211 Cyl. or No. 300 cans, respectively, and did so in 1941.

In respect of such product above-listed on this Table I under the headings of "Fruits, Vegetables, and Juices," a canner who lacks adequate equipment, machinery, or plant facilities for efficient packing of such product in any can size or sizes specifically designated therefor on this Table I may pack such product in a larger can (other than a No. 12 can) if (a) said canner is currently equipped to pack such product in such larger can and did so in 1941, and (b) such larger can is recommended for such product by the National Bureau of Standards Recommendation R155-40; and he may pack such product in a No. 12 can in any event.

FISH AND SHELLFISH

1. Salmon. 2. Sardines. 3. Tuna and Tuna-like Fishes. 4. Mackerel. 5. Alewives, including Alewife Roe. 6. Fish Flakes. Dried Fish Flakes not to be packed. 7. Crab.

MISCELLANEOUS FOODS

1. Cold Pack Foods, including, but not limited to Blueberries, Strawberries, Apples, Cherries, Peaches, Asparagus, Lima Beans, Peas, but only if packed in 30-lb. or larger cans.

Baby Formulas

3. Evaporated Milk, only in 14½-oz. or larger cans. See Table II.

4. Dry Milks, including only Dry or Powdered Whole Milk, in 1-lb., 2½-lb., 5-lb., 10-lb., or 25-lb. cans.

Special Dietary Products, including but not limited to Baby Foods.

Honey, but only in "5-lb." or larger cans.

Dehydrated Vegetables, only in No. 10 or larger cans.

TABLE II—SECONDARY PRODUCTS CANS

All the individual restrictions appearing on this Table, relating to can sizes, repacking, or specific limitations on the form in which a product may be packed, shall take effect as of March 1, 1942, unless otherwise indicated. All quantity limitations, however, relating to size of pack refer to the entire calendar year commencing January 1, 1942, except in the case of citrus fruits, for which see the seasonal basis provided in Item 8 of "Fruits" and Items 3, 4, and 5 of "Juices" below. Such quantity limitations, moreover, refer to the amount of tinplate used in packing rather than to the amount of product packed. The quantity limits imposed by this Table relate only to the pack permitted for civilian consumption. To the extent of additional requirements by the Army, Navy, Lend-Lease or other U. S. Governmental Agency, such pack may be increased.

FRUITS

1. Apples and Crabapples, only in No. 10 or larger cans. Whole Apples, Apple Butter not to be packed. 75% of 1940 pack.
2. Apple Sauce, including sauce from Crabapples, only in No. 2 or No. 10 cans.
3. Apricots, only in No. 2½ or No. 10 cans. Whole apricots not to be packed. 75% of 1940 pack.
4. Berries, including but not limited to Blackberries, Blueberries, Huckleberries, Loganberries, Raspberries, Strawberries, only when packed as berries, and only in No. 2, No. 2½, or No. 10 cans.
5. Cherries, including but not limited to Red-Sour-Pitted and Sweet, only when packed as cherries, and only in No. 1 Tall, No. 2, No. 2½, or No. 10 cans.
6. Cocoanuts, only shredded with milk, and only in No. 10 cans.
7. Cranberries, including Cranberry Sauce, only in No. 300, No. 2, or No. 10 cans.
8. Grapefruit and combination of Oranges and Grapefruit, including only Segments, Sections, and Slices and only in No. 2, No. 2½, or No. 5 cans but 100% of 1941 pack.
9. Olives, only Ripe, and only in No. 1 Tall, No. 2, No. 2½, or No. 10 cans and only 50% of 1941 pack.
10. Peaches, Freestone, 75% of 1940 pack in California, only in No. 2, No. 2½, or No. 10 cans.
11. Pineapple, including only Sliced, Crushed, Tidbits, and only in No. 2, No. 2½, No. 3 Cyl., or No. 10 cans. Spears not to be packed.
12. Plums and Fresh Prunes, only in No. 2½ or No. 10 cans. 50% of 1940 pack.

VEGETABLES

1. Beets, only in No. 2, No. 2½, or No. 10 cans. 75% of 1940 pack.
2. Carrots, only in No. 2, No. 2½, or No. 10 cans. Whole carrots not to be packed. 75% of 1940 pack.
3. Carrots and Peas, only in No. 2, No. 2½, or No. 10 cans. 75% of 1940 pack.
4. Pimentos and Peppers, only in No. 2, No. 2½, or No. 10 cans. 50% of 1940 pack.
5. Pumpkin and Squash, only in No. 2½ or No. 10 cans. 50% of 1940 pack.
6. Rhubarb, only in No. 10 cans. 50% of 1940 pack.
7. Sauerkraut, 50% of the present bulk kraut holding, and only in No. 2, No. 2½, or No. 10 cans.
8. Spinach, and other Green Leafy Vegetables, only in No. 2, No. 2½, or No. 10 cans.
9. Okra, only in No. 2, No. 2½, or No. 10 cans.
10. Tomato Products (See Table I)
Paste, only in 6Z cans.
Sauce, only in 8Z Short cans.

Above tomato products may be packed in whole or part from contents of other tinplate cans of 5-gal. or larger size.

11. Vegetables, Mixed, including 90% of any combination of vegetables included on Table I and Table II, but no potatoes to be included; only in No. 2, No. 2½, or No. 10 cans. 75% of 1940 pack.
12. Succotash, only when made from fresh or frozen vegetables, and only in No. 2 or No. 10 cans. 100% of 1941 pack.

JUICES

1. Lemon Juice and Lime Juice, only in 8Z Tall, No. 2, or No. 10 cans. 50% of 1940 pack.
2. Pineapple Juice, only in No. 2, No. 3 Cyl., or No. 10 cans.
3. Grapefruit Juice, only in No. 2, No. 3 Cyl., or No. 10 cans. 125% of 1940-1941 pack.
4. Orange Juice, only in No. 2, No. 3 Cyl., or No. 10 cans. 125% of 1940-1941 pack.
5. Combination of Grapefruit and Orange Juice, only in No. 2, No. 3 Cyl. or No. 10 cans. 125% of 1940-1941 pack.
6. Fruit Nectars, only in 211 Cyl., No. 2, No. 3 Cyl., or No. 10 cans.

In respect of each product above-listed on this Table II under the heading of "Fruits, Vegetables, and Juices," a canner who lacks adequate equipment, machinery, or plant facilities for efficient packing of such product in any can size or sizes specifically designated therefor on this Table II may pack such product in a larger can (other than a No. 12 can) if (a) said canner is currently equipped to pack such product in such larger can and did so in 1941, and (b) such larger can is recommended for such product by the National Bureau of Standards Recommendation R155-40; and he may pack such product in a No. 12 can in any event.

MISCELLANEOUS FOODS

1. Canned Condensed Soups, meaning soups packed in condensed form so that, when prepared for serving at the table, at least a can of water or other liquid is added to a can of soup to make a soup representative of its class. Such canned condensed soups to be packed only in No. 1 Picnic or larger cans; and to be only soups that are produced from products included on Tables I or II. 100% of 1941 pack.
2. Canned Soups, Broths, Chowders, other than canned Condensed Soups. 25% of 1940 pack. Not to be packed after June 30, 1942.
3. Condensed Milk, Goats' Milk, only in 14-oz. or 15-oz. cans.
4. Malted Milks, only in 1-lb., 5-lb., 10-lb., or 25-lb. cans; Modification of Milk, except Filled Milks.
5. Eggs, frozen, only in 10-lb. and larger cans.
6. Liquid Oils, Vegetable, Marine, and Animal, or edible blends of such oils, only in 1-qt. or larger cans.
7. Hardened Edible Oils and Unhardened or Hardened Lard, and Rendered Porkfat, and Edible Tallow, and animal, vegetable, and marine blends thereof only in 3-lb. or larger cans, and only at rate of 100% of 1940 rate for first half year and only 60% of 1940 rate after June 30, 1942.
8. Sweet Syrups, including only Cane, Maple, Molasses, Corn, and Sorghum Syrup, and only in "5-lb." or larger cans.
9. Evaporated Milk, only in 6-oz. cans. See Table I.
10. Frozen and Storage Cream, only in re-use cans and only in nested style 45-50 lb. cans.

MEATS

1. Beef, Veal, Mutton (corned, roast, or boiled; only for human consumption).
2. Brains, only in 10½-oz. or larger cans. 75% of 1940 pack.
3. Chili Con Carne when not packed with beans, only in 1-lb. cans.
4. Meat Loaf containing at least 90% meat and no added water. 75% of 1940 pack.
5. Meat Spreads, 50% of 1940 pack.
6. Sausages in Casings
 - (a) Vienna Sausage, only in 4-oz. or larger cans. 75% of 1940 pack.
 - (b) Sausage in Oil, or Lard, or Rendered Porkfat, only in No. 5 or larger cans. 75% of 1940 pack.
 - (c) Other Sausages in Casings, only in 12-oz. or larger cans, and only 25% of 1940 pack.
7. Bulk Sausage Meats, only in 12-oz. or larger cans. 125% of 1940 pack.
8. Tongue, whole only, 75% of 1940 pack.
9. Boned Chicken or Turkey, only in 1-lb. or larger cans.
10. Chopped Luncheon Meats, only in 12-oz. or larger cans. 125% of 1940 pack.
11. Meat (Potted), only in 3-oz., 5-oz., or larger cans. 125% of 1940 pack. (Smaller sizes limited to 50% of 1940 pack.)

FISH AND SHELLFISH

1. Shad. 2. Clams, Mussels (Whole and Minced). 3. Oysters. 4. Shrimp.

FISH AND SHELLFISH

(For refrigeration shipments, fresh)

1. Oysters, Shrimp, Clams, Scallops, Crabs; only when shucked, and only in 1-lb., 1-gal., or larger cans. 100% of 1941 pack.
2. Fish Fillets, only in 20-lb. or larger cans. 100% of 1941 pack.

TABLE III—SPECIAL PRODUCTS CANS

In respect of a can used as a container for a product listed below, tinplate may be used to manufacture all or any part of such can (part meaning "top, bottom, or body") if, but only, if, specific authority is given by this table to use tinplate for such purpose. The use of terneplate is similarly restricted, and both may be used only to the extent to which either or both were used in 1940 (i. e., 100% of 1940) unless otherwise stated.

In respect of any can or part thereof where specific authority to use tinplate or terneplate is not given, blackplate or other material must be used.

Where it is necessary to solder a fitting or trimming to a can top and neither tinplate nor terneplate is specified in the table for such top, then such top (together with the fitting, trimming or screw cap) may be made of tinplate or terneplate, respectively, if the body is made of tinplate or terneplate, respectively.

The word "Throughout," as used in this table, means all the parts of a can and includes fittings, trimmings and screw caps.

1. Alcohol (other than for anti-freeze), alcohol mixtures (for paint) and pharmaceutical and industrial grain alcohol, only in 5-gal. and larger cans: tinplate throughout. Where chemically pure alcohol is not required, terneplate throughout.
2. Cements, only in 1-qt. or larger cans.
 - Rubber, Solvent Type. Bodies and tops: terneplate.
 - Rubber, Latex Type. Tinplate throughout.
 - Linoleum. Bodies: terneplate.
 - Radiator. Bodies: terneplate.
3. Chemicals, Liquid, only in 1-qt. or larger cans.
 - Fly Spray. Bodies: terneplate. Fly Spray (Pyrethrum and Rotenone base). Bodies: tinplate.
 - Lighter Fluids. Bodies: terneplate.
 - Acetone and Amyl Acetate. Terneplate throughout, except when chemically pure, in which case tinplate throughout may be used.
 - Carbon Bisulfide and Triethanolamine. Terneplate throughout, except when chemically pure, in which case tinplate throughout may be used.
 - Oleic Acid. Bodies: tinplate.
 - Sodium Silicate. Only in 5-gallon or larger cans: terneplate throughout.
 - Dry Cleaners. Only in 1-qt., 1-gal., or larger cans. Bodies: terneplate.
 - Phenols, including Carbolic Acid and Lysol: tinplate throughout.
 - Benzol, including but not limited to Naphtha. Bodies: terneplate.
4. Dyes, only in 1-qt. or larger cans.
 - Pastes or Liquids: terneplate throughout, except for certified colors, in which case tinplate may be used throughout.
5. Fire Extinguisher Fluid. Terneplate throughout.
6. Graphite. Terneplate only where water is present.
7. Oil, Mineral for Medicinal use, only in 1-gal. or larger cans: tinplate throughout.
8. Nicotine Sulphate. Tinplate throughout and only in 1-qt. or larger cans.
9. Soap, Liquid. Pack only 50% of 1940 pack and only in 1-qt. or larger cans: tinplate throughout.
10. Turpentine. For industrial use, only in 1-gal. or larger cans: terneplate throughout. When packed as chemically pure, tinplate throughout, but only in 1-qt. or larger cans.
11. Liquid Glues, Pastes, Adhesives. In cans of 1-qt. to 1-gal., pack 50% of 1940 pack; in larger cans, 100% of 1940 pack: terneplate throughout.
12. Glycerine (C.P. and U.S.P.). Tinplate throughout. In cans of 1 qt. to 1 gal., pack only 50% of 1940 pack. In 1-gal. or larger cans, 100% of 1940 pack.
13. Glycerine (other than C.P. and U.S.P.). Terneplate throughout. In cans of 1-qt. to 1-gal., pack only 50% of 1940 pack. In 1-gal. or larger cans, 100% of 1940 pack.
14. Polish. Terneplate throughout. Only 50% of 1940 pack.
15. Waxes.
 - Paste: Bodies: terneplate. Only 25% of 1940 pack.
 - Emulsions: Terneplate throughout. Only 25% of 1940 pack.
16. Dairy ware, including dairy pails, milk strainer pails, hooded milking pails, milk kettles, milk strainers, setter or cream cans: tinplate throughout. 110% of 1940 pack.
17. Disinfectants, including, but not limited to, crystals, in 1-qt. or larger cans: tinplate throughout. Only 50% of 1940 pack.
18. Health Supplies, as defined by Order No. P-29: tinplate throughout.
19. Paints and Accessories, including but not limited to shellac, varnish, lacquer, enamel, and paint thinners. Only in 1-qt., 1-gal., or larger sizes after March 1, 1942: terneplate throughout. In cans of less than 1-gal. capacity, only 50% of 1940 pack allowed.

Conversion—Conservation—Control



The country is approaching in earnest the enormous task of a complete changeover from peacetime activities to war production of its industrial machine. Just as the plans for military drafting on a wide scale have been extended, so it is the intention to convert and utilize every conceivable industrial plant. Clinics have been scheduled for various parts of the country, following the pattern set at Lowell, Mass., in January, where more than 5,000 New England manufacturers representing small business units consulted with prime manufacturers with the view to obtaining sub-contracts. Resulting from this one clinic, a total of \$50,000,000 will be spread among small industries in New England. Not because of direct connection with packaging activities, but because they may suggest ideas to readers of Modern Packaging, we detail the following cases of conversion or adaptation of facilities:

A manufacturer of cash registers revamped some old belt-driven machines to produce chrome nickel forgings, parts for gun magazines and fuses.

Looms and women workers in an eastern factory have turned from lingerie-making to producing mosquito nets for protecting soldiers fighting in the tropical swamps and jungles.

A small manufacturer of egg poachers and aluminum frying pans is now making percussion caps, struts, flat hinges and other parts for planes.

A toy train maker is now manufacturing 8 in. compasses and gun-sights.

A watch maker is making precision instruments.

A maker of fishing boxes is using the same equipment to make ammunition boxes.

A razor blade firm is making primers.

Conservation

Efforts in the direction of waste collection are becoming more definitely pointed. The Tin Salvage Institute, a cooperative activity of the Package Institute and the Collapsible Tube Manufacturers Assn., have marshalled retail and wholesale druggists throughout the United States to collect toothpaste and shaving cream tubes ordinarily discarded after use. The undertaking has the full approval of the War Production Board. Wholesale druggists are collecting used tubes from retailers for shipment in bulk to the Tin Salvage Institute, Long Avenue, Hillside, N. J. The WPB will allocate the reclaimed metal for use where it will best serve the interests of the nation during the war. Proceeds will be contributed to a national charity.

The Bureau of Industrial Conservation, under Lessing J. Rosenwald, has mobilized retail stores throughout the nation for the collection of waste paper, scrap metal, old rags, rubber and other materials urgently needed. Merchants have been asked to sign pledges of cooperation, and store signs, window emblems, etc., have been provided.

The Federal Wholesale Druggists Assn. was urged by Col. George S. Brady of WPB's Division of Civilian Supply not to wait for the government to force economies, but to put conservation principles into practice voluntarily. He deplored the "innumerable small sizes of packages" for which the drug

stores act as channels and through which they are sold.

The City of Erie, Pa., worked out and put into effect, by cooperative action of its leading manufacturers, a plan of industrial conservation which is reported to be producing excellent results. This plan covers conservation of raw materials, scrapping of obsolete machinery and full utilization of scrap and by-products. Copies of the Erie Plan may be obtained by writing to the Bureau of Industrial Conservation, Washington, D. C.

Industry is cooperating in re-use of carboys, drums, etc., by means of stickers requesting quick return of such containers.

The Federal Trade Commission and the Dept. of Commerce have announced discontinuance of certain daily or periodical releases in the interests of conservation. It is estimated that this will result in a considerable saving of paper. There is still opportunity in other governmental departments for effective conservation of paper to be put into force. Example, the Breskin Publishing Co., publishers of Modern Packaging and Modern Plastics, received an invitation to bid on books for the censorship branch of the Navy's Intelligence Office, consisting of 90 pages, size 8½ × 13. Unfortunately these pages were printed both sides so they can't be used for scratch paper. However, they will find a place in New York City's waste paper collection program.

Private agencies perform similarly. The "Waste Paper Conserving Industries of America" have issued a sizable brochure consisting of 22 pages, 28 in. × 39½ in., with a

An example of the posters placed in drug stores to call public attention to collection of collapsible tubes.



handsome paperboard cover of at least 16-point stock, spirally bound, containing reproductions of newspaper and magazine articles on the subject of waste collection.

Cellophane order L. 20, which was to have expired February 15, has been extended until March 15, at which time it may be further extended or a new order will be issued which will take its place.

Controls

The War Production Board, headed by Donald M. Nelson, in a frictionless manner took up where OPM left off. Its tightening of controls is bringing all-out allocation nearer. WPB anticipated the new price control law by investing OPA with full authority to ration all goods and commodities sold on the retail market.

Certain new forms of application blanks for individual preference ratings are provided by Priorities Regulation No. 3 which became effective February 2. Use of the new forms is mandatory after March 7. Important feature of the new system is that individual preference ratings may now be extended to suppliers and sub-suppliers of the original applicant by a simple endorsement on purchase orders. Preference Rating, Certificates PD-1A and PD-3A are covered by this priorities regulation. The latter being issued only by Army and Navy and other authorized procurement officers.

As previously pointed out in this column, priority regulations mean business. The Division of Industry Operations of WPB announced punitive action against an aluminum foundry in Chicago for violation of priority orders and also ordered the complete suspension of production and sale by an electric washing and ironing machine company, also for violation of priority orders.

Meanwhile the Food and Drug Administration continues its efforts to eliminate filthy food from the market and to prosecute manufacturers and shippers who are responsible for law violation. The report of the Department for the fiscal year 1941 reveals that the year's work was characterized by an increased number of court actions and by improvement in the sanitary conditions in many food processing plants.

Truthful labeling necessary

If war shortages necessitate changes in quality and construction of consumer goods, information should be given to the public, Dan A. West, Deputy Director of the Consumer Division of OPA, declared in a statement commending members of the wool and textiles industries who oppose suspension of the wool labeling act during the emergency. OPA has ruled that bed linens sold after March 2 must bear labels containing information and specifications regarding the fabrics, particularly must they be identified as seconds if such is the case, and as substandards if not up to minimum specifications. Comment by Roger Wolcott, executive secretary of the National Consumer Retailer Council, indicates that these provisions will make consumers more "label conscious" than ever before and impress them with the need for informative labeling for other types of goods.

Package materials under firmer controls

Manufacturers of various kinds of papers have been asked by N. A. McKenna, Chief of WPB Pulp & Paper Branch, to cooperate in a program of standardization and simplification. In each group, so Mr. McKenna announced, the particular recommendations were made with the assistance of information submitted by representative manufacturers and mer-

chants. The accompanying table presents these recommendations as they affect varieties of paper used in packaging.

Asked for comment, an executive of the American Paper & Pulp Assn. remarked, "These recommendations appear to be very reasonable. Whether they are necessary, only the developments of the year can tell. At present the production of paper and pulp, according to our index, is between 105 and 108 per cent of capacity, whereas the orders are under 100 per cent of capacity. This should be compared with the situation last April, when paper production was 96 per cent of capacity and orders were 115 per cent of capacity. The method of procedure, as applied by Mr. McKenna's department, should settle any possible question as to the legality of the measure. We consider it a good idea—if it's necessary."

Packaging of hosiery appears due to undergo radical changes, if WPB's request is carried out. Makers of medium- and high-priced hosiery are asked to double the pairs of hosiery in single cardboard boxes and to eliminate individual wrapper or envelope for each pair. In the low-priced field, manufacturers are asked to eliminate boxes entirely and package such hose in bundles of a dozen. Exception is made in the case of nylon hosiery because of limited supplies of the raw material. Request does not apply to hosiery distributed through direct mail selling and exception is also made in the case of extreme sizes. It is estimated that this will save annually 7,000,000 pounds of boxboard and paper.

Metal situation

Developments in the Far East make imperative more and more stringent restrictions on tin. Drastic cuts in allotments of cans will be made for all but essential food stuffs. New tin order, M-81, was issued February 11 and it is reprinted in its entirety on another page. It rules out cans for products which are non-essential from a primary defense standpoint. Elsewhere in this issue (see report of National Canners Convention) will be found details of WPB's order to can manufacturers, released during the Chicago convention. It is now expected that additional restrictions will curb civilian production by 25 per cent or more.

Restrictions on aluminum, nickel, brass and copper continue to appear. Except for direct defense materials (for example, aluminum used in containers for intravenous solution and blood) these metals are practically on the forbidden list for packaging purposes.

The United States tin smelter now under construction in Texas will be rushed to completion with the assistance of an A-1-a rating for materials, J. S. Knowlton, Director of Industry Operations, announced recently. The plant, which was started as an 18,000-ton smelter, has been increased to 52,000 tons capacity and may be increased further. It will process Bolivian tin ore, as well as concentrates from Malaya and the Netherlands Indies received since the outbreak of hostilities in the Pacific.

Good-by colors

Colors of packages will undergo considerable modification in the near future. Package producers and designers are already making plans to meet the situation caused by shortages of raw materials for pigments. Price schedule No. 98 has been announced by Leon Henderson, OPA Administrator, to prevent possible price increases for titanium pigments. Producers are cooperating with the price administrator.

Under Order issued February 4, chromium was placed under a complete allocations system. The Director of Industry Operations must specifically (Continued on page 96)

WPB Recommendations for Pulp and Paper Standardization and Simplification
(based on information submitted by representative manufacturers and merchants)

DESCRIPTION	BASIS SIZE (INCHES)	BASIS WEIGHT (POUNDS)
KRAFT WRAPPING PAPER		
Machine finish	24 × 36—500 sheet reams	25-30-40-50-60-80
Machine glazed	24 × 36—500 sheet reams	20-25-30
BOOK PAPERS		
English (machine) finish	25 × 38	30-40-45- 50- 60
(Limited to 2 grades. "Making Orders" permitted over 10,000 lbs.)	28 × 44	39-52-58- 65- 78
	32 × 44	44-59-67- 74- 89
	35 × 45	50-66-75- 83- 99
	38 × 50	60-80-90-100-120
Supercalendered	25 × 38	50- 60
(Limited to 2 grades. "Making Orders" permitted over 20,000 lbs.)	28 × 44	65- 78
	32 × 44	74- 89
	35 × 45	83- 99
	38 × 50	100-120
Process (machine) coated	25 × 38	50- 60- 70
(Limited to 2 grades. "Making Orders" 10,000 lbs.)	28 × 44	65- 78- 91
	32 × 44	74- 89-104
	35 × 45	83- 99-116
	38 × 50	100-120-140
Plain offset	22½ × 35	41½- 49½- 58- 66½- 83
(Limited to 1 grade. "Making Orders" 10,000 lbs.)	25 × 38	50 - 60 - 70- 80 -100
	28 × 44	65 - 78 - 91-104 -130
	32 × 44	74 - 89 -104-119 -148
	35 × 45	83 - 99 -116-133 -166
	38 × 50	100 -120 -140-160 -200
	41 × 54	117 -140 -163-186 -233
	44 × 64	148 -178 -208-238 -296
Offset coated two sides	22½ × 35	58- 66½- 83
(Limited to 1 grade. "Making Orders" 10,000 lbs.)	25 × 38	70- 80 -100
	28 × 44	91-104 -130
	32 × 44	104-119 -148
	35 × 45	116-133 -166
	38 × 50	140-160 -200
	41 × 54	163-186 -233
Glossy coated two sides	25 × 38	60- 70- 80-100
(Limited to 3 grades. "Making Orders" 10,000 lbs.)	28 × 44	78- 91-104-130
	32 × 44	89-104-119-148
	35 × 45	99-116-133-166
	38 × 50	120-140-160-200
Coated one side	25 × 38	50- 60- 70
(Limited to 2 grades. "Making Orders" 10,000 lbs.)	28 × 44	65- 78- 91
	32 × 44	74- 89-104
	35 × 45	83- 99-116
	38 × 50	100-120-140
Color limitation: No more than five colors (other than white and ivory) provided grades were manufactured in colors prior to December 1, 1941.		
VEGETABLE PARCHMENT		
Wrapping purposes	24 × 36—500 sheet reams	27-35-45
For lard liners	24 × 36—500 sheet reams	35-43
Parchmentized kraft	24 × 36—500 sheet reams	35-40
GUMMED SEALING TAPE		
	24 × 36—500 sheet reams	35-60-90
	Rolls—1 -2½-4	35
	Rolls—1½-2 -2½-4	60
	Rolls—2 -2½-4	90
SUGAR BAGS		
	1- 2- 3- 4- 5- 6	50
	8-10-12-16-20-25	60
WRAPPING TISSUE		
	24 × 36—500 sheet reams	10-12
("Making Orders" permitted of 5,000 lbs., or full day's run for machine)	(May also be cut 20 × 30 on same basis weight)	
Regulations also propose specific pulp content for manner of manufacture of four standard grades, including white, colors, kraft and manila.		



Out among the exhibits, back to the judging table—all day the judges selected what they considered best, bringing it back for all to see and consider. Here are Lathrop, Baxter, Southwick, Nash, Barbara Anderson and Hovde getting ready to hand down a decision on the feminine frills that make cosmetic packages.



Look 'em over! They're all giving this one the "works" in the preliminary selections in each classification.



Charlie Southwick (center) looks as if he doesn't like Hovde's selection. All right, pick your own, Charlie.



See Ben Nash grab those liquor bottles, while Barbara Anderson might be saying, "Please make mine vanilla!"



The critical point—back at the judges' table where written details on the entry blanks are evidence for opinions.

Judging the All-America

It can't be told until April—the decision of those six distinguished judges who selected the winners of the 1941 All-America Package Competition, because it won't be announced this year until the Annual Award issue of Modern Packaging comes out in April, instead of March, to time publication date with the Annual Packaging Exposition, sponsored by the American Management Assn., April 14 to 17, at the Hotel Astor, New York City.

Behind closed doors the six judges went to work at the zero hour, 11 A. M., Wednesday, January 14, in Grand Central Palace, New York City, where each considered the more than 20,000 packages, making selections and eliminations in accordance with his own specialized viewpoint in the field of packaging:

* Consumer—Barbara Daly Anderson, director of Consumer Service Bureau, Parents' Magazine. Marketing—Dr. Howard T. Hovde, Wharton School of Finance and Commerce (University of Pennsylvania) and President of the American Marketing Assn. Designer—Ben Nash, whose catalog of achievements reach from spectacular signs on the Great White Way to butter cartons. Package research—C. A. Southwick,

who has engineered the packages of General Foods Corp. since 1930. Production—T. R. Baxter, Standard Brands, Inc., who so ably filled the large gap in the rank of judges left vacant by the death of the late George R. Webber, manager of Standard Brands Package Development Bureau and for seven years an All-America judge. Palmer J. Lathrop, Bristol-Myers Co., who pinch hit for William M. Bristol, Jr., now heading up Donald Nelson's Health Supplies Branch of WPB.

Awards will be made sometime during the week of the Packaging Exposition, before which winners will be notified of the time and place. Judging this year was more critical than ever. Of the 20,000 packages submitted only 57 were selected for citation. Only major awards were granted. There were no honorable mentions and certain divisions were disregarded because of lack of progress in some fields. Thus, a winning package had to undergo searching examination. It had to be representative of the most advanced packaging in the history of the industry—representative of more than 20 years of peacetime development—the like of which may not be seen again until the grim emergency is over.



Far into the night among the 20,000 packages they worked until the job was done.



"We've got to know if they're good," said Lathrop, testing.



Hovde volunteered as official taster when Mrs. Anderson made funny faces.



Lathrop does some deep thinking while Baxter decides it's sausage, not bologna, no matter how thin you slice it.



The end of the Odyssey was a "John Henry" on the dotted line. Charlie Southwick and Ben Nash cast their votes.



BONUS CARTON

Here are the new and the old packages for Bathasweet. Some years ago the Bathasweet Corp. hit upon the idea of boosting sales through the use of a bonus package. People—women particularly—like to buy an article which offers a premium. Such a purchase appeals to their liking for a bargain. The company decided to pack together its giant size container of Bathasweet and a generous trial size of their products.

These two items were placed in the carton which was first adopted, the one on the left in the photograph. The large and small container made a rather cumbersome pair and it was necessary to have a special sleeve inserted in the carton which would hold the smaller article. The sleeve fit over the cylinder of the trial size container and kept it in place.

When the company decided to change the package, it worked out the new carton which retained all the good features of the old and eliminated the bad ones. The die-cut window was effective, so it remained, but since plastics are no longer available, the transparent sheeting was not used. The cardboard sleeve was eliminated and the top flap of the carton so scored and cut that when folded in to form a platform on the premium package fit horizontally in the top of the carton. It was held in place by the flap of the carton which folded down in the carton in the usual way. The new carton represents a saving of about 16 per cent in the use of paper board.

Credit: Folding box by Atlantic Carton Corp.

Design Histories



BERRIES IN WOOD

Longino & Collins, Inc., pack their whole preserved strawberries the way Grandmother used to pack hers during preserving time in the old days. Women for generations cooked delicious preserves of various kinds right at home. Perhaps they were not too familiar with the fundamentals of the preservation of cooked foods and many years passed before the advent of the vacuum-sealed jar. However, they found that by placing these preserves in wooden containers, such as butter tubs, small liquor kegs, etc., and sealing the container with ordinary bees' wax that the preserves would remain in a perfect state of preservation for quite some time.

When Longino & Collins, Inc., took over a small preserving plant in Louisiana about a dozen years ago, one of the first recommendations Mr. Longino made was that the company pack whole preserved Louisiana Klondyke strawberries in wooden pails like his mother used to pack in the hills of Mississippi. A firm was found that could make the little buckets for the company and before many weeks had passed, Longino and Collins were offering to the New Orleans trade, 5-lb. wooden pails of Tasty Brand Whole Preserved Strawberries. Today the company packs and distributes thousands of these pails of strawberry preserves each year throughout the United States and Canada.

It has found that the old-fashioned way of packing preserves has a simplicity of appearance that affords definite sales appeal.

Credits: Pails by New England Woodenware Corp.

NEW WINE BOTTLE

An important packaging change in the wine industry is the new Tipo package now being introduced by Italian-Swiss Colony. Tipo is a chianti type wine and these types of wines have traditionally been marketed in raffia-wrapped, light green bottles of a color which has been associated for centuries with this particular kind of Italian table wine.

Italian-Swiss Colony formerly used these traditional chianti type bottles and imported them from Italy. War conditions and the desire of officials in the company for a modern, streamlined container brought about a change in the packaging which resulted in a container entirely American in manufacture.

The new bottle is as clear and free from imperfections as modern American methods of manufacture can make it. A colorful, plastic base supplants the traditional raffia base and the outer wrapping is a paper twine of uniform quality. Unique features of the bottle design are lugs at the base of the bottle to permit secure attachment of the base and corrugations on the bottom shoulder to provide a starting point for the winding of the wrapping material. The plastic base is provided with a hole through which the wrapping is drawn and held securely by a knot on the bottom side. Colorful red and green tape is used to bind the paper twine wrapping at four points around the bottle.

Credit: Bottles by Owens-Illinois Glass Co. Plastic base by American Molding Co. from material by Tennessee Eastman Corp.



Design Histories

DRINKING STRAWS

These folding cartons for drinking straws prove a boon both to the storekeeper and to the housewife. Drugstores, cafeterias and other places, where drinking straws appear on counters and tables for the convenience of customers, may have to supplement their regular metal and glass drinking straw dispensers with a supply of paper cartons. During rush hours it is not always possible to keep throughout the store the regular dispensers filled with an ample supply of straws.

Miro Straw dispensers make it possible for sufficient straw always to be available. The unique umbrella-top construction combines to make the carton dust-proof and the straws easily accessible. The umbrella top is effected by scoring the corner so that it may be lifted up and folded back. The straws may be removed through the aperture. When not in use, the corner is again folded down. The contents of the package are thus kept clean and entirely free from dust. For any article which is used in the serving of food, the sanitary factor is of major importance. A carton which can provide features for greater sanitation has advantages which the storekeeper is quick to appreciate.

The smaller, flat package was designed for distribution as a household item. Inasmuch as this package required maximum display and selling value on the counter, it was constructed so that a clear picture of the product and its uses was afforded.

Credit: Cartons designed by Koodin Lapow Associates. Made by Miro Paper Products Corp.

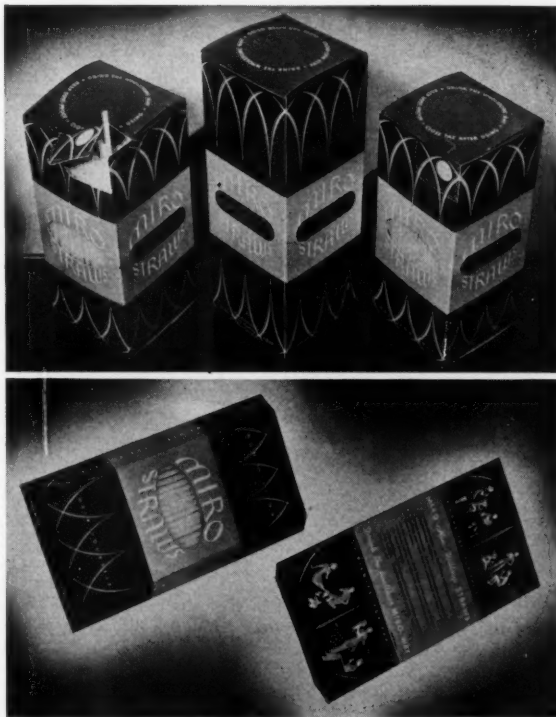




PHOTO BY U. S. SIGNAL CORPS.

Wanted: new canned meats for soldiers

The American soldier consumes almost one pound of meat a day, which makes him the No. 1 meat eater of the world.

Since the nation is in a war of world-wide proportions, canned meats must of necessity be the backbone of the reserve food supply. Yet the meat items now used are apt to result in monotony and the Army is looking to the canning industry for aid in perfecting additional new canned meat items to add variety to the soldier's diet.

Major Jesse H. White, Quartermaster Corps, Chicago, outlined these needs as a challenge to the canning industry in his address before the National Canners Assn. in Chicago. Here are some of the items the Army wants:

1. Three additional meat items for Type C Field Ration, which now includes meat and beans, meat and vegetable hash, meat and vegetable stew. These three items have proved highly satisfactory, but in the interest of greater variety, the Army wants three more. Like the original three, these items must be palatable either cold or hot, should have a fair calorific value and should be sufficiently different in flavor to give variety to the meals.

2. Two of the meat components of the Type K Ration—

veal luncheon meat and pork luncheon meat—are so nearly alike that it is believed desirable to substitute a different item for one of them. The cervelat component, also, is not ideal for this particular use and a substitute is desired for that unit.

3. A liver product is highly desirable to secure the nutritive constituents of that product.

4. It is believed that more work should be done on sterile canned hams. As with 6-lb. cans of pork luncheon meat, the Army is hesitant to accept canned hams that might not withstand the abuse of exposure to tropical heat without refrigeration. Considerable work has already been done with this item, and the Army has made a sample shipment of approximately 4,000 pounds of so-called "sterile hams" to one of our overseas posts. Reports should soon be forthcoming to indicate the stability of this product.

5. The present method of preparing canned pork sausage, both in bulk and in links, results in a product that is very wasteful since approximately one-half of the contents of the can is thrown away or is of little use in the field, due to the rendering of fats and moisture from the meat during processing. In addition, the flavor of the product bears but little re-

semblance to that of fresh pork sausage. The Army would welcome a change in the method of preparation of this product with a view to avoid excessive waste and to improve the flavor.

6. So-called "roast beef" is received with considerable favor by Army messes. It is believed, however, that this product can be improved upon both in flavor and consistency.

7. Because of the highly nutritive value of eggs, it was hoped that eggs could be incorporated with other foods in a canned item. Experiments made by the Subsistence Research Laboratory have not offered much encouragement in this line. Eggs do not stand processing temperatures well, since they become hard, leathery, and discolor badly. They do not combine well with bacon. The best combination yet found at the Research Laboratory was one of egg, chopped ham, and potato cubes. This combination may be developed into a satisfactory product.

8. Canned chicken and canned turkey for hospital use are a definite need. It is believed very desirable, however, to develop a product with a much higher percentage of broth than the solid-packed product produced at present for F.S.C.C.

9. Outside the particular realm of the canned meat industry, the Army desires a sterile, canned, whole milk without the distinctive overcooked taste of evaporated milk. This is particularly desirable for field use to provide a palatable and nourishing milk beverage where fresh milk is unavailable.

10. Of considerable importance at the present moment is the development of a spread for bread for use by expeditionary forces, particularly to tropical countries. This product must be able to withstand rather high temperatures, have a higher melting point than butter or oleomargarine and must be packed in tin.

11. With the curtailment of the nation's supply of tin and the enormous demands placed upon our reserve stocks by the war, conservation of tin plate is highly desirable, and may soon become a dire necessity. The preparation of partially dried, or of desiccated meats, protected by containers or coverings other than tin, may deserve special consideration.

12. The Subsistence Research Laboratory has been directed by the Office of the Quartermaster General to develop a special "Mountain Ration," suitable for use in extreme cold, to be eaten at times without facilities for heating, prepared from products and in containers not effected by freezing. Suggestions for such items will be gratefully received.

13. The Subsistence Research Laboratory has been directed, also, to prepare a ten-ration package to simplify distribution of rations at division distribution points. This involves the selection of containers that will stow well and economically in a box or other package, the selection of foods that will give adequate variety and palatability as well as nutritional balance and the selection of an outer container of proper dimensions and stability. The tin cans or other containers should be of such size as to approximate the requirements of the particular item for ten men. Here, again, suggestions will be gratefully received. The need is not for meat items alone, but for any ration item. In the interest of variety, it is desired to develop varied rations to be issued on successive days.

Major White also presented a list of the many suggested improvements in army rations which members of the canning industry have sent to the Quartermaster Corps. These give a comprehensive picture of what is being developed:

a. Pork sausage patties, fried before canning. These lose but little in processing, and they taste like pork sausage. The seeming high cost of this product is largely offset by the waste in Army canned pork sausage. Slowness of production is the greatest objection to this product.

b. Several liver combinations have been offered, sufficient to indicate that a suitable product might be in the offing. We are particularly anxious to develop this product.

c. Beef and noodles has been offered as one of the three additional items for the Type C Field Ration. It is favorably considered not only for this purpose, but for mess use as well in No. 10 cans. Samples submitted have been highly satisfactory.

d. Pork hash has great possibilities.

e. Corned pork and chopped ham are already in production and are receiving consideration.

f. A concentrated soup stock or gravy made from bones has been offered by at least two Association members. This product requires some further development, but may be found advantageous in the field, where boneless beef is being used.

g. A meat and spaghetti product has been developed as one of the three additional meat items for the Type C Field Ration. The Subsistence Research Laboratory considers this a desirable product, but as yet it has not been approved.

h. Hungarian goulash, prepared under an original Old World formula, has been prepared and presented for consideration. It is believed that this product might have greater Army acceptance than chili con carne.

i. Canned Mortadella sausage meat has been offered as a substitute for the cervelat in the Type K Field Ration. For field use it probably would have acceptance equal to that of cervelat.

j. A beef and rice product has been presented. It is doubtful if a rice product can be made entirely satisfactory. Experiments with rice made at the Subsistence Research Laboratory do not indicate that this product lends itself successfully to canning operations.

k. Samples of cheese and bacon and cheese and ham, using both smoked and unsmoked cheese, have been presented as substitutes for one of the meat items of the Type K Field Ration. It is believed that a very satisfactory product can be developed for this purpose.

l. Gelatin coatings for hams and bacon, and for fresh meats, have received considerable consideration and experimentation. However, their adaptation to Army needs has not been perfected.

m. Much experimental work has been done in packaging to lessen the present burden upon tin. Cellophane, Pliofilm, Cry-O-Vac and many other materials, singly and in combination, sealed under vacuum and at atmospheric pressure, have been given extensive tests. Packages so prepared have been sent to the Philippine Island, to Hawaii and to Panama, and returned to the Subsistence Research Laboratory. Many of these have been satisfactory beyond our fondest hopes; others have proved worthless. It is believed that satisfactory coverings for products such as cheese, bacon and hams will be developed that will resist moisture and gas penetration.

"While it is not absolutely essential that all of these problems be solved," said Major White, "yet their solution will aid a great deal in bringing this conflict to a quicker and more satisfactory conclusion by improving the well-being and morale of our men at the front. The splendid spirit of cooperation shown by the industry in the past is the Army's assurance of continued aid . . . of mutual helpfulness."



1



2

Packaging

1 Claudette's Laundrette white and blue cardboard folders hold three packets of a special soap preparation particularly adapted to the laundering of fine underthings and hosiery. Directions for using are printed on the backs of each of the packets and the many articles of clothing which may be successfully cleaned with the soap granules are given on the front, together with a clever line illustration. The folders have found their most popular acceptance when displayed in the lingerie department of stores. Designed by A. B. Drullard. Soap packets by Samuel Cupples Envelope Co., Inc.

2 A new type of squat compact jar for jellies and preserves, similar in many respects to the jar which has become such an important item in army commissaries, has been selected by D. B. Scully Syrup Co. for their Pure Grape Jam. The container has a firm base and a large opening through which the contents can be spooned with ease. Its narrow sides have ridges for facile handling, while the front and back are plain with adequate label space and ready visibility. The closure is of the vacuum press on type and has a colored design to match the lithographed label. Jars by Owens-Illinois Glass Co. Closure by Crown Cork & Seal Co. Labels by Gugler Lithographic Co.

3 This unusual home unit type of container for Blue Bell Potato Chips consists of two inner, plain glassine bags, each containing half a pound of potato chips. These bags are then

placed in the large one, thus assuring double protection. Because this makes a rather large package, standing from 11 to 12 in. high, its display value is enhanced. The present package replaces the carton which was formerly used and thus conserves essential materials. At the same time, the bag retains a full degree of product individuality and sales appeal. Made by Milprint, Inc.

4 Timeliness, an important factor in the selling of a new article, is well shown in the new paint box, "The American," brought out by The American Crayon Co. The red, white and blue motif is given an additional note of snap and sparkle with the introduction of bright yellow. The blue shield with white stars, which forms the platform for the colorful cakes of water color, carries the patriotic motif inside the box. Since this is a box intended for children of elementary school age, the durability of the sturdy metal container appeals to parents as well as to the youngsters themselves. Box made by The American Crayon Co.

5 A handy container for Bondex waterproof cement paint is found in this flare style pail equipped with a bail, conducive to ease in handling. It is attractively lithographed and has a pry-up closure which permits resealing. The Reardon Company, manufacturers of Bondex, suggests reuse of the pail as a mixing bucket by painters, as a scrub or feed bucket by farmers. Made by Owens-Illinois Can Co.

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Pageant

6 This deluxe baby gift box, containing a complete kit for baby's bath, has proved a popular number in the Johnson & Johnson line of products. It holds two bars of baby soap, two cans of talcum, one jar of cold cream and a large bottle of oil. The carton for the baby oil has a clever die-cut window which permits full view of the bottle. The products are packed in a practical box with a hinged lid which serves as a container strong enough to last over the relatively long period during which the contents are required. Made by Cambridge Paper Box Co. Carton for baby oil and blank for set-up box developed by Robert Gair Co., Inc.

7 Some women find they need special cosmetics because their skin is particularly sensitive. These preparations of Almay Pharmaceutical Corp. are made to meet this need and have been on the market for 10 years. These packages represent a recent re-design of the firm's line. The face powder comes in a set-up box, tight-wrapped in a crystalline paper in rose mottled effect. The cream jar is of opal glass and the bottle of skin freshener has a plastic closure. The lipsticks are of metal with a chased design. Information has been comprised in one label. This affords savings in materials and in labor. Box by E. N. Rowell Co., Inc. Jar by Hazel-Atlas Glass Co. Closures by Armstrong Cork Co. Lipstick containers by Chase Brass & Copper Co., Inc. Bottle by Maryland Glass Corp.

9



8 Knowing that Mother likes perfume as well as any young glamour girl, Parfumerie Bourjois, Inc., is using a special Mother's Day folding carton for its bottle of Evening in Paris perfume. The traditional red and white carnations decorate the carton which is in two shades of blue. The word, "Mother," is lettered in white in the dark blue at the base of the carton and the top has product name printed in dark blue across it. The carton is an effective reminder to gift hunters for Mother's Day.

9 Parsons Hardware Co. uses this two-piece telescope corrugated box for packing sets of steel casket hardware. Double corrugated thickness on both sides and ends provides adequate protection and eliminates the need for end stuffing. The extension handles are packed in pairs, back to back, in separate compartments, resulting in compactness and permitting the shipment of 12 complete sets of hardware as a unit instead of the former 10 sets. Special provision is made for the end handles, three sets of each being packed in a separate corrugated box and placed in the master box. Boxes by The Hinde & Dauch Paper Co.

10 An unusual carton, which can be turned by the dealer into a pair of counter display containers, has been adopted by M. & M. Limited for marketing their five cent Candy Coated Chocolate. The twin pack provides separate display cartons, thereby saving counter space and the carrier is converted into the display cartons by breaking them along the perforated lines. Carton by Robert Gair Co., Inc.

10





Unspillable ink bottle

"An open inkwell tipped over . . . and no harm done!" "The ink stays inside Carter's new Dip-Well—in defiance of gravity." Thus reads an advertisement describing the "magic" of a new bottle closure which Carter's Ink Co. has introduced as the feature of its new package called the Dip-Well.

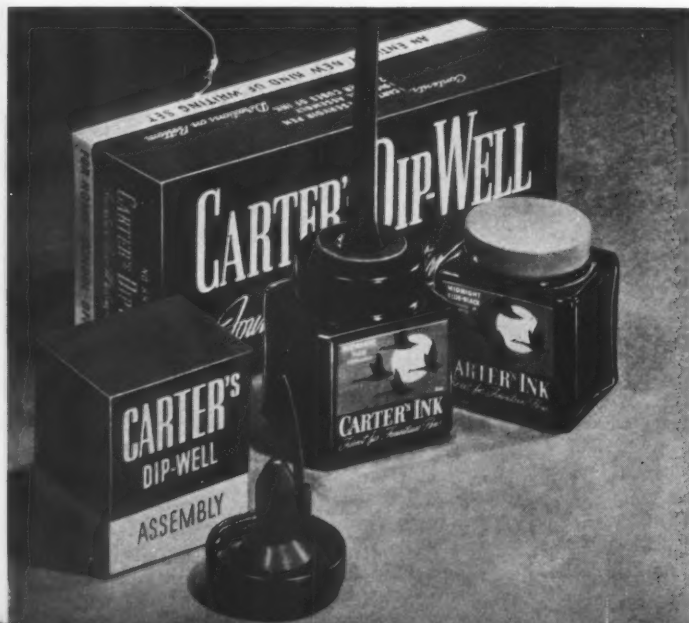
The metal screw cap is equipped with a rubber assembly which contains the working supply of ink. This consists of a pen receiving part, a reservoir and a tube reaching to the bottom of the bottle. When the special pen, which comes with the set, is pressed into the opening, ink enough for a day's use is forced from the bottle into the reservoir, and the pen holds enough ink to write a page with each dipping.

The pen receiver part is also equipped with a tiny valve, which closes automatically when the pen is withdrawn from the ink well, so that spillage and evaporation are avoided. The closure works equally well whether the bottle is full or down to the last few drops.

The new package unit contains, in addition to the patented closure, two of the company's standard cube bottles of ink and the special pen. All of these items are packed efficiently into a rectangular carton with end flaps. The closure assembly itself is put into another folding carton of suitable size with protective paper board insert to keep the closure from moving around. This carton is placed in the larger carton between the two bottles of ink, each protected by a corrugated wrapper. Fitting neatly the length of the carton, the special pen is packaged in a long light-weight carton for protection. Further protection is provided for the pen point itself by the use of a tiny paper tube, cut just the length of the pen point. Printing in effective bold letters on the carton is in shades of brown and tan.

This unit is sold in drug, department and stationery stores for less than a dollar and has been distributed nationally. The company has also introduced a deluxe Dip-Well package with a similar combination of merchandise, but containing a base and cover to fit the Carter bottle instead of the second bottle of ink. All of this is fitted into a telescope set-up box printed in red and black on white.

Credit: Patent closure designed and assembled by the company. Metal caps by National Seal Co. Bottles by Hazel-Atlas Glass Co. and Brockway Glass Co. Labels designed by J. Walter Thompson, printing by Consolidated Lithograph Co. Folding cartons by Bicknell-Fuller. Box by Scott & McDonald, Inc.





GRANDMA GOT SHORTWEIGHTED

Before the days of unit packaging, the consumer was at the mercy of the storekeeper's scales—and ethics—on the matter of weights and measures. One of the many benefits of modern packaging is the assurance that pre-filled packages contain accurately what they are supposed to.

Of course, a pre-requisite of accurate filling is uniform package production. And this is where F. N. Burt excels. We have licked this problem on the largest possible scale. Packages are produced in

thousands, in millions—the first identical in every respect with the millionth, all possible because most Burt packages are produced automatically. This includes set-up boxes (small, round and oval), rigid transparent containers, folding cartons and display cartons. The reason basically is that we have developed and built our own machinery to do the kind of work we—and you—demand for mass packaging. This makes for economy as well as speed. Overnight shipments to key packaging points in the East are part of the service.



F. N. BURT COMPANY, INC.

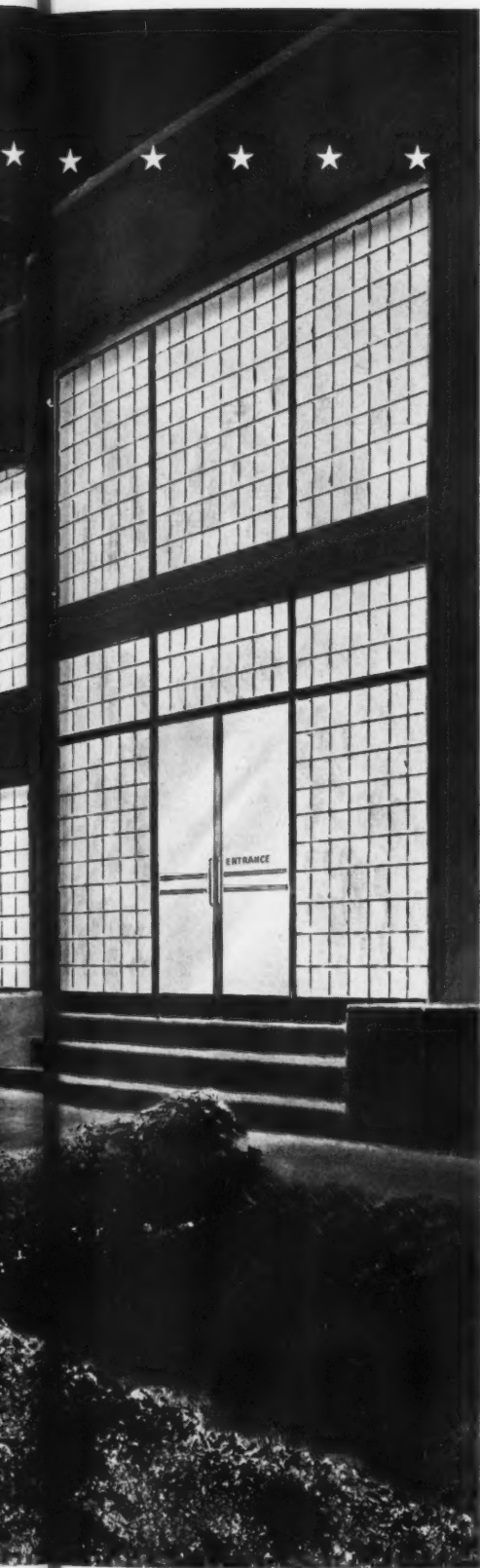
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FACING A CRISIS? ★ ★





★ ★ He's ready to help

He's an Owens-Illinois Packaging Research Engineer. Through him, our years of technical experience in handling empty and filled packages—in studying processing and production lines, is available to you.

How can he help you? Frankly, we don't know! A partial roll call of what we've done for others, however, gives you an inkling.

We showed one *food manufacturer* how to operate glass containers in a "zigzag" drop... an operation that had never been done before. We helped a *bottler* to correct washing operations which had been responsible for surface-abrasion of his bottles. For a *drug manufacturer*, we designed containers and, working with machinery suppliers, made possible the first large-scale packaging of "dry drugs in glass." We helped redesign the entire bottling room set-up for a *rectifier of spirits*.

Your factory men will welcome O-I Packaging Research Engineers. They not only take kinks out of production lines, but also help smooth the flow of your product clear to consumer.

So if you face a crisis—or if you suspect that there *might* be some wasted "man-hours" in your production line, it will pay you handsomely to ask these men in.

OWENS  **ILLINOIS**
GLASS COMPANY TOLEDO, OHIO



Left. A close-up of the avocados in their wraps of transparent plastic sheeting. Brand identification is provided by the tiny Mexican hats which are stickers affixed after the fruit is wrapped. Right. This is the way the avocados are packed after each one has been wrapped. The shallow, wooden shipping box is lined with excelsior to prevent the fruit becoming bruised in transit. Too light packing is avoided.

Breather wraps for avocados

Members of La Habra Heights Avocado Assn. in California experimented for more than a year, trying to find a means of preserving the freshness of their product. Avocados, like most tropical fruits, present difficult packing problems. They must "breathe" and any wrapping which does not allow the fruit to do so, smothers it. If avocados, on the other hand, are left unprotected, they deteriorate rapidly with consequent loss due to spoilage.

The Association finally tried wrapping the fruit in transparent plastic sheeting. The avocado is simply placed in a square piece of the sheeting and the four corners twisted tightly to hold the wrap in place. The plastic sheeting is slightly porous and permits enough air to enter to keep the fruit in good condition over a long period. Fruit thus protected keeps at least two weeks longer than when left unwrapped. At the same time, the fruit remains fully visible through the transparent wrap, which in this way enhances rather than detracts from the sales value of the avocado. Wrapped in this breather material and carefully packed in boxes lined with excelsior, the avocados are placed in refrigerator cars for shipment all over the country. Ripening is retarded by refrigeration when avocados are not wrapped and this causes some deterioration of the fruit because, when it is removed from cold storage, it ripens too quickly. Retailers also found that all of the fruit ripened at one time and

in order to protect themselves against loss, they were forced to charge 25 per cent more for the good fruit.

When avocados are wrapped in the plastic sheeting, the ripening process is slower. The ripening may also be staggered if desired by unwrapping one or two fruits entirely so that the process will be quickened. A slight tear or small hole in the wraps of several others will quicken the ripening slightly. Thus, the retailer can gage his supply of ripened fruit correctly and sell it more reasonably since loss from spoilage is greatly cut down.

He also does not need to worry about the skins of the avocados becoming black. Fruit that has been in refrigeration will develop a black skin by the time it is ready to be used. When packed in plastic sheeting, it retains its brilliant green skin until ripe. The La Habra Heights Avocado Assn. also finds that the sparkling, transparent wrapper makes the product more attractive and more salable. The Association uses a brand label on its wrapper. Each wrap bears a small, yellow sticker in the shape of a Mexican hat which affords brand identification. The Association feels that by protecting its product from spoilage through the use of these wrappers that it has made a contribution to the program of food conservation, so necessary in wartime.

Credit: Transparent plastic sheeting by Celanese Celluloid Corp.

AN AMERICAN INSTITUTION WORKING WITH AND FOR AMERICA



MADE IN

U.S.A.

FOR
PROTECTION OF
AMERICAN INTERESTS
AT HOME AND
ABROAD



Far more inspiring than martial music or star-spangled speeches is the proud implication of these simple words, "Made in U. S. A."

Proud boast of a nation and that nation's freemen, the very soil of our land echoes the slogan in the whispering song of ripening wheat, the murmuring of budding corn and in the swelling chorus of all growing things nature provides as food. If, as has been said, "Food will win the war and write the peace" it is in truth our greatest weapon. How imperative then that we unite in conserving and protecting the products of soil in all their manifold forms. This is defense work of the first order. To this cause we dedicate our hearts, our minds and our honest endeavors.



Folke Becher
PRESIDENT
RHINELANDER PAPER COMPANY

FROM THE BEST THAT'S MADE TO THE CHEAPEST THAT'S GOOD

Genuine Greaseproof
Laminated Frozen Food Wrappings
Confectionery Papers
Cereal Wrapping Papers

Laminated Greaseproof Papers
Lard and Shortening Liners
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MARCH • 1942

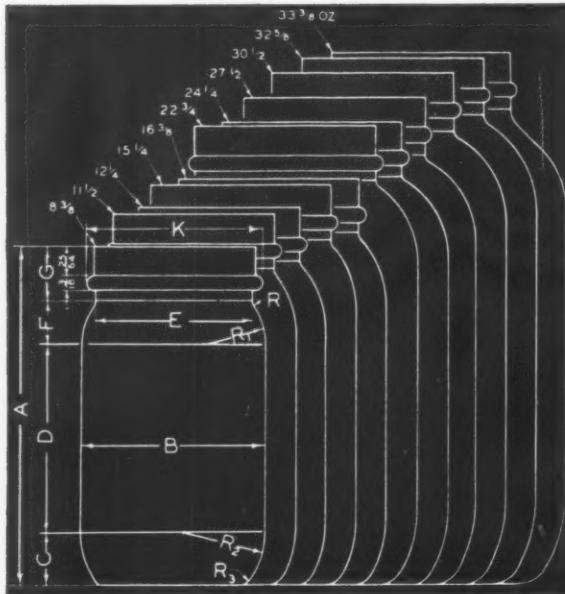
57

Standardize to save

Bureau of Standards sponsors new stock design of glass containers and recommends fewer sizes

Savings of from 25 per cent to 30 per cent in glass and from 20 per cent up to 40 per cent in metal closures are predicted by the Division of Simplified Practice, National Bureau of Standards, if users of glass containers adopt a new stock design and cut the number of sizes to a minimum. W. E. Braithwaite of the Division presented the new design to meetings of various packer associations during National Food Week in Chicago. Because of the scarcity of metals and soda ash, the Bureau of Industrial Conservation of the

Glass technologists state that these jars require 25 to 20 per cent less glass than comparable stock jars now in use; even greater savings are realized when compared with many private mold jars. A saving of 20 to 40 per cent metal in closure manufacture is made possible by smaller openings or finishes. Ratio of jar widths to heights permits economical packing and savings of paper board.



OPM requested the Division of Simplified Practice to design an all-purpose, economical line. The Division took the problem to the Design and Specification Committee of the Glass Container Assn. of America, which created the new design.

Recommended for jams and jellies

The new containers are recommended for preserves, jams, jellies, fruit butters, peanut butter, mustard, mayonnaise, pickles, relish, mincemeat and similar products. There are eleven sizes, ranging from 8³/₈-oz. overflow capacity to 33³/₈ oz. Designs are symmetrical and, while conservative, are certainly not unattractive. In the opinion of the sponsors, the new line represents the maximum practical container capacity per man-hour and pound of material necessary in manufacture.

The line has been presented to the National Preservers Assn., the Peanut Butter Manufacturers Assn. and the National Pickle Packers Assn. In each case the standardized line was enthusiastically received; when the reduction in sizes was brought up, however, there was no final agreement. The division recommends that sizes be limited to the following:

- Products measured in fluid ounces — 1/2 pt. (8³/₈ fl. oz.); 1 pt. (16³/₈ fl. oz.); 1 qt. (32⁵/₈ fl. oz.)
- Jams, jellies, preserves, mincemeat—1 lb. (12¹/₄ fl. oz.); 2 lb. (24¹/₄ fl. oz.)
- Peanut butter —1 lb. (15¹/₄ fl. oz.); 2 lb. (30¹/₂ fl. oz.)
- Honey —1 lb. (11¹/₂ fl. oz.); 2 lb. (22³/₄ fl. oz.)

Since such standardization would require drastic changes from present packaging practices, the packers have taken them under advisement for the present. A questionnaire has been sent to all packers to be filled in with all present sizes of glass containers. The results will be analyzed by the Division of Simplified Practice, and (Continued on page 100)

CAPACITY OVERFLOW	WEIGHT	A	B	C	D	E	F	G	K	R	R ₁	R ₂	R ₃	400 FINISH SIZE
8 ³ / ₈ OZ	5	4 ⁵ / ₁₆	2.512	1 ¹ / ₁₆	2 ³ / ₈	2.125	8 ³ / ₁₆	4 ³ / ₁₆	2.312	¹ / ₈	⁵ / ₈	1 ¹ / ₈	³ / ₁₆	58 MM
11 ¹ / ₂ OZ	6 ¹ / ₂	4 ⁷ / ₁₆	2.790	4 ⁹ / ₁₆	2 ³ / ₈	2.125	³ / ₈	4 ³ / ₁₆	2.324	¹ / ₈	1 ¹ / ₄	1 ⁹ / ₁₆	¹ / ₄	58 MM
12 ¹ / ₄ OZ	6 ¹ / ₂	4 ⁷ / ₁₆	2.781	4 ⁹ / ₁₆	2 ¹ / ₈	2.125	³ / ₈	4 ³ / ₁₆	2.324	¹ / ₈	1 ¹ / ₈	1 ⁹ / ₁₆	¹ / ₄	58 MM
15 ¹ / ₄ OZ	7 ¹ / ₂	5 ¹ / ₈	3.010	1 ³ / ₁₆	2 ¹ / ₁₆	2.375	5 ⁹ / ₁₆	4 ³ / ₁₆	2.562	¹ / ₈	1 ³ / ₈	1 ² / ₁₆	¹ / ₄	63 MM
16 ³ / ₈ OZ	7 ³ / ₈	5 ⁷ / ₁₆	3.090	2 ⁷ / ₁₆	2 ¹ / ₁₆	2.375	1 ⁵ / ₁₆	4 ³ / ₁₆	2.562	¹ / ₈	1 ³ / ₁₆	1 ² / ₁₆	¹ / ₄	63 MM
22 ³ / ₄ OZ	10	5 ³ / ₈	3.460	1 ⁵ / ₁₆	3 ¹ / ₁₆	2.375	1 ¹ / ₁₆	4 ³ / ₁₆	2.562	¹ / ₈	1 ³ / ₁₆	1 ¹ / ₂	³ / ₁₆	63 MM
24 ¹ / ₄ OZ	10 ¹ / ₄	5 ⁹ / ₁₆	3.531	3 ¹ / ₁₆	3 ¹ / ₁₆	2.375	1 ¹ / ₁₆	4 ³ / ₁₆	2.552	¹ / ₈	1 ⁵ / ₁₆	1 ¹ / ₁₆	³ / ₁₆	63 MM
27 ¹ / ₂ OZ	11 ¹ / ₄	6 ¹ / ₁₆	3.679	1	3 ² / ₁₆	2.375	1 ¹ / ₈	4 ⁷ / ₁₆	2.562	¹ / ₈	1 ³ / ₁₆	1 ¹ / ₁₆	³ / ₈	63 MM
30 ¹ / ₂ OZ	11 ³ / ₄	6 ³ / ₁₆	3.758	1 ¹ / ₁₆	3 ³ / ₁₆	2.375	1 ³ / ₁₆	4 ⁷ / ₁₆	2.562	¹ / ₈	1 ¹ / ₄	1 ¹ / ₁₆	³ / ₈	63 MM
32 ³ / ₈ OZ	12	6 ³ / ₈	3.828	1 ¹ / ₁₆	3 ⁴ / ₁₆	2.375	1 ¹ / ₄	4 ⁷ / ₁₆	2.562	³ / ₁₆	1 ¹ / ₈	1 ¹ / ₄	³ / ₈	63 MM
33 ³ / ₈ OZ	12 ¹ / ₄	6 ¹ / ₁₆	3.899	1 ³ / ₁₆	3 ⁴ / ₁₆	2.375	1 ³ / ₁₆	4 ⁷ / ₁₆	2.562	¹ / ₄	1 ⁹ / ₁₆	1 ¹ / ₁₆	³ / ₈	63 MM

Any standard G.C.A. glass finish suitable to jar body mold may be used. For finishes other than the specified G.C.A. 400 shallow continuous thread use comparable sizes to G.C.A. No. 400 as shown below:

G.C.A.	G.C.A.	G.C.A.
400	140	800
58	58	58
63	63	63
G.C.A.	G.C.A.	G.C.A.
1400	1700	3900
63	55	58
66	60	63

drums...in action

**LOADING UP
FOR THE MARINES!**

TEXACO SUPPLIES THE MARINE CORPS WITH LAND, SEA, AND AVIATION DUTY LUBRICANTS THROUGH THE U.S. NAVY DEPARTMENT. TEXACO ALSO SUPPLIES LUBRICANTS TO THE COAST GUARD, WAR DEPARTMENT AND FOR OTHER GOVERNMENT REQUIREMENTS.

DRUMS of Texaco lubricants follow the United States Marines around the world! On land, on sea and in the air... the airplanes and mechanized equipment of the Marines are cared for as carefully as their rifles and machine guns... kept in shape for immediate action whenever and wherever duty calls.

Some of the drums we supply The Texas Company may have been on Wake Island... at Midway... at Guam...

or may at this moment be accompanying Marine detachments on other heroic exploits. That, of course, we do not know.

But we do know that the Crown Drums we supply Texaco are made stoutly enough for service anywhere in the world.

CROWN CAN COMPANY, PHILADELPHIA, PA., *Division of Crown Cork and Seal Company.* Baltimore • St. Louis • Houston • Madison • Orlando • Fort Wayne • Nebraska City

**INDEPENDENT
AND HELPFUL**

CROWN CAN

Canners face grim year with determination

CONVENTION HIGHLIGHTS

1. War Production Board orders February can deliveries cut one-half for eleven important products. "Only the Beginning."
2. Army will continue search for improved packaging methods and materials.
3. 1942 pack will be biggest in history.
4. Government to preempt up to 44 per cent of 1942 production.
5. New machinery high in quality, but scarce.

Grim but determined, the largest group of canners ever to attend a national convention met in Chicago during the last week in January. So prepared were they that when the long-awaited limitation order on cans did arrive it was anti-climactic. The order, in telegraphic form and free from the usual verbiage, was as follows:

"Until further notice you are hereby ordered not to manufacture, sell, or deliver during February, 1942, for the packing of the following products more than 50 per cent of the total quantity of tinplate cans and terneplate cans by size, type, and contents which you manufactured, sold or delivered during February, 1940: baking powder, beer, biscuits, candy and confectionery, cereals and flour, chocolate and cocoa, coffee, dog food, petroleum products, spices and condiments, and tobacco. You are further ordered not to manufacture, sell, or deliver during the rest of January, 1942, more than 12½ per cent of the total quantity of such tinplate and terneplate cans for the foregoing products which you are permitted by this telegraphic order to manufacture, sell or deliver during February, 1942."

The general tendency of the canners was to discount the significance of this order in itself and to emphasize that it is probably the first in a series of drastic restrictions on metal containers. In the sessions and in private conversations the following points regarding packaging problems were repeatedly made.

Packages for essential foods will be found

"Food will win the war and write the peace." There is no doubt that the Government of the United States intends to utilize fully the economic and political value of the American soil and its products. Food will be supplied our allies and dangled before our enemies; everything else will be sacrificed to the production and preservation of the greatest larder in history.

Less essential products must seek new packages

This means not only products which are themselves less essential, but also products whose present packages are less essential to them. Every packager who now uses metal and who could conceivably do without it should be prepared for restrictions.

Outlook for substitutes is not good

Glass containers will fill in as far as they are able. They cannot be produced, however, in sufficient quantities to meet the great demand which there will be for them.

Transparent films of all kinds can hardly be counted on to continue their present volume, let alone expand. They require scarce materials also.

Paper boxes and cartons, while not scarce, are fully occupied with their normal markets. They may be available in the future, however, for some products at least.

Fifty million pounds of food, for example, can be quick frozen and packaged in 5,000,000 pounds of paperboard, cellophane or waxed paper, as against 13,500,000 pounds of tinplate required if the foods were canned, E. W. Williams, Secretary of the 2nd National Quick Frozen Foods Exposition, reported at the meetings held concurrently with the canners' convention. This would mean a substantial saving of metal.

Shipping containers are still available, but the burlap shortage and expanded lend-lease demands make the future a question.

There is no tendency to give up on packages

In spite of all the difficulties, the canners remain keenly aware of their public responsibility. They realize that, in war as in peace, they must not only continue to serve the needs of the American people, but also must continue to deliver the goods in the best possible condition—which means in the best available package.

Government buys large portion year's pack

Current Army estimates of the percentage of this year's production which will have to be reserved for its consumption are as follows:

Vegetables		Fruits	
Kind	Per Cent	Kind	Per Cent
Asparagus	44	Apples	32
Lima Beans	22	Red Sour Cherries	27
Stringless Beans	21	Sweet Cherries	25
Peas	38	Peaches	23
Corn	18	Pears	26
Tomatoes	30	Pineapple	25
Tomato Juice	14	Fruit Cocktail	16

In addition, the Army will require substantial amounts, with the exact percentage not yet determined, of beets, spinach, sweet potatoes, pumpkins, sauerkraut, applesauce, apricots, grapefruit and prunes.

In general the Army will take its supplies from the middle grade of each product, but may take higher and lower grades

NEW DEFENSE USES

FOR

Ethocel Sheetting

**SUBSTITUTE FOR
STRATEGIC
METALS**

**LIGHTEST
CELLULOSE
MATERIAL
AVAILABLE**

**EXCELLENT
ELECTRICAL
INSULATOR**

**TOUGH AT
EXTREMELY
LOW
TEMPERATURES**

Unprecedented demands for strategic metals and other vital materials emphasize the need for qualified and proven substitutes. ETHOCEL* SHEETING provides a ready answer to many of these urgent problems. It can be specified for applications now requiring metals so necessary for other purposes where replace-

ment is either impossible or impractical. The physical properties and outstanding characteristics of ETHOCEL SHEETING (listed on this page) indicate its qualifications for defense uses.

ETHOCEL SHEETING is made of Dow Ethylcellulose, the lightest and toughest cellulose material commercially avail-

able. It has proven itself in many applications where service requirements are unusually severe, even at extremely low temperatures.

Why not investigate these new and vital possibilities for ETHOCEL SHEETING? Address inquiries to the Plastics Sales Division.

QUALIFICATIONS OF ETHOCEL SHEETING FOR WAR-TIME USES

- **Low Temperature Flexibility.** Flexible at -70° F. Toughest cellulose material commercially available.
- **Excellent Ductility.** Draws, where depth is equal to diameter, are easy to obtain. Material remains flexible after drawing.
- **Heat Resistance.** Softening Point, 300° F. Melting Point, 375° F.
- **Slow Burning Rate.** Certified by Underwriters' Laboratory.
- **Good Tensile Strength.** 10,000 lbs. per sq. inch.
- **Excellent Electrical Insulator.** Dielectric strength 3,000 volts per mil. (A. S. T. M. short time test 2,500 volts per second.)
- **Light Stability.** Fadeometer resistance more than 600 hours without embrittlement or discoloration.

THE DOW CHEMICAL COMPANY MIDLAND, MICHIGAN

New York, St. Louis, Chicago, San Francisco, Los Angeles, Seattle, Houston
*Trade Mark Reg. U. S. Pat. Off.

Ethocel Sheetting

DOW ETHYLCELLULOSE

DOW

if necessary to make its stock complete. Number 10 is the preferred size for cans of all these products, but smaller cans (Nos. 2 and 2½) will be taken if necessary.

Minimum fair prices

Minimum fair prices for tomatoes for canning and minimum fair price increases over 1940 for peas for canning this year were announced by Secretary of Agriculture Claude R. Wickard. Both vegetables are among the most vital products sought in the Food for Freedom campaign to meet the war needs. The Department is asking for 40,000,000 cases of canned tomatoes and 38,000,000 cases of canned peas this year for use in meeting increased civilian and military needs and Lend-Lease requirements.

The minimum prices which have been set by the Department for the 33 commercial tomato and 24 pea states are those which canners are expected to pay growers this year before becoming eligible to sell these two products to the Government under its wartime purchase program. Department officials emphasized that these are minimum prices and do not constitute ceilings. Any increase over these prices is a matter for negotiation between canners and growers.

The Department of Agriculture, through the Agricultural Marketing Administrator, will purchase all quantities of 1942 canned tomatoes and canned peas offered to it by canners who have been certified by the USDA State War Boards as having agreed by contract with growers to pay growers at least the minimum fair price applying to their locality.

Armed services on lookout improved packages

Not only is the Army seeking more variety in its canned "emergency rations," but it also wants improved packaging methods. A case in point is canned pork sausage. Rendering of the fats and moisture during processing results in a product of which nearly one-half must be thrown away. The Army also needs packages which occupy less storage space, which are unaffected by heat or cold, which are opened with a minimum of difficulty and will make less of a drain on our critical materials. Although the military authorities have first call on all our resources, they do their part in conservation.

Machinery is available, but not plentiful

Food processing being just about as essential an industry as there is, the manufacturers of machinery and equipment for canning have been favored in the matter of priorities for necessary materials. Nonetheless, new equipment is going to be progressively harder to obtain. It is the announced aim of the Government to encourage repair of the existing plant wherever possible, instead of the installation of new machinery. Also the facilities of an increasing number of canning machinery manufacturers are being devoted to the production of other more necessary types of machines.

Under these circumstances there has been in the past year neither the time nor the incentive to push the development and sale of great technical machine improvements. There is no question, however, of the quality of the machinery on display this year, and new equipment will certainly be available in sufficient quantities to process and package all production for which containers are obtainable.

1942 trend toward larger unit packages

The watchwords of the year will be "economy" and "conservation." Both of these mean larger units. Large packages mean less material, less labor, less transportation cost, less

distribution expense and less convenience. It is certain that the last will be sacrificed to obtain the others, for the duration at least. Indeed, there is considerable sentiment which holds that the trend here started will continue after materials again are plentiful, that the consumer, having learned the economies of large packages, will stick to them.

On the other hand, it may be said that nothing but a war could reverse the trend towards smaller packages, that such dissimilar factors as the dietary habits and the architecture of contemporary America are built around small packages, and that the convenience and variety of small packages will carry them again to popularity.

Grade labeling likely to increase

A by-product already apparent in this war is standardization. There will be more and more of it as time goes on, and its increase will have an effect on labeling practices. As scarcities force whole industries to standardize their products, many objections to grade labeling may disappear. A shortage of sugar is already in operation to put a degree of standardization into the canning industry. Other scarcities will probably accelerate the trend. Here again opinions differ widely as to the permanency of the situation, once the stimulus is removed.

Objectives of the National Canners Assn.'s descriptive labeling program were crystallized in an official definition of an adequate descriptive label for canned foods drafted at the meeting of that association's Labeling Committee. Text of the definition is as follows:

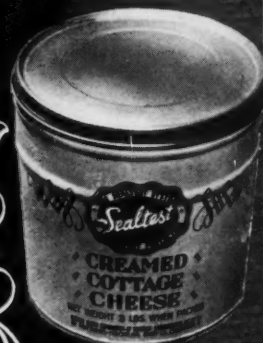
"The adequate descriptive label for canned foods states separately, in specific, uniformly used terms, readily understood by the ordinary person, and in legible type so arranged as to be easily seen and read, every fact about the product which is genuinely useful to the consumer and which can be stated. For the sake of uniform use and of equitable and ready enforcement, each term is either self-defined or is based upon an objective standard."

The committee moved that for each canned food commodity not already provided with complete descriptive terms a separate small committee be appointed to work with the Labeling Division to develop appropriate descriptive terms for that commodity, to indicate what objective tests are necessary and to devise an ideal sample label for that commodity.

As to the labels, themselves, they are probably the least scarce of all the canners' supplies. Paper may not be so white, pastel inks may not be so attractive, but the effect will not be serious in the near future.

New preserving processes will be widely used

The two most important methods of preserving foods, next to conventional canning, are dehydration and quick-freezing. Both may be expected to increase, since they have some obvious advantages over canning under present conditions. They produce food which may be packaged in more readily available materials. Their packages represent less dead weight and, in some cases, the volume of the product is appreciably reduced. For these and other reasons, they will probably increase in importance. But they are by no means the answer to all our problems. Dehydrated foods are already an important factor in our export program and will continue to be, but expansion on any considerable scale for domestic consumption will probably be deferred until after the war is over. Frozen foods will be used up to the limit of the present freezing and storage capacity, but increasing that capacity will be a long and difficult job. (Continued on page 98)



JUST WHAT CAN A TIN CAN DO FOR YOU?

WHEN you manufacture a product . . . any product . . . that is sold in individual packages such as lithographed metal cans, you've got to make that package attractive. An attractive, colorful "tin can" will sell merchandise for you. A drab, unimpressive, old fashioned package cannot compete in today's markets. Heekin Lithographed Cans . . . in all shapes and sizes . . . are inexpensive in spite of their attractiveness and colorful beauty. Let us talk over your packaging problems . . . without obligation. THE HEekin CAN CO., CINCINNATI, O.

HEEKIN CANS

(LITHOGRAPHED)
With Harmonized Colors

Good boxes with 16 per cent less board

Everybody is in the same boat these days to make current paper supplies go as far as possible. Every company is working to find new methods of conservation, yet to maintain the same protection and attractiveness of their packages.

Many of these first efforts deal with ways to save board in the construction of boxes and among the efficient developments reported are the new boxes now being used by Carson Pirie Scott & Co., Chicago department store, for packing its private brands of blankets and curtains.

This company was confronted with the problem of effecting a saving of between 15 and 20 per cent in the tonnage of box board used for these boxes.

They did this by planning a construction which would permit them to run the grain of the board lengthwise on the covers of the boxes and crosswise on the bottoms. This has eliminated full double side and end walls on both covers and bottoms in favor of double end walls and single side walls on the box covers and with single end walls and double side walls on the bottoms of the boxes.

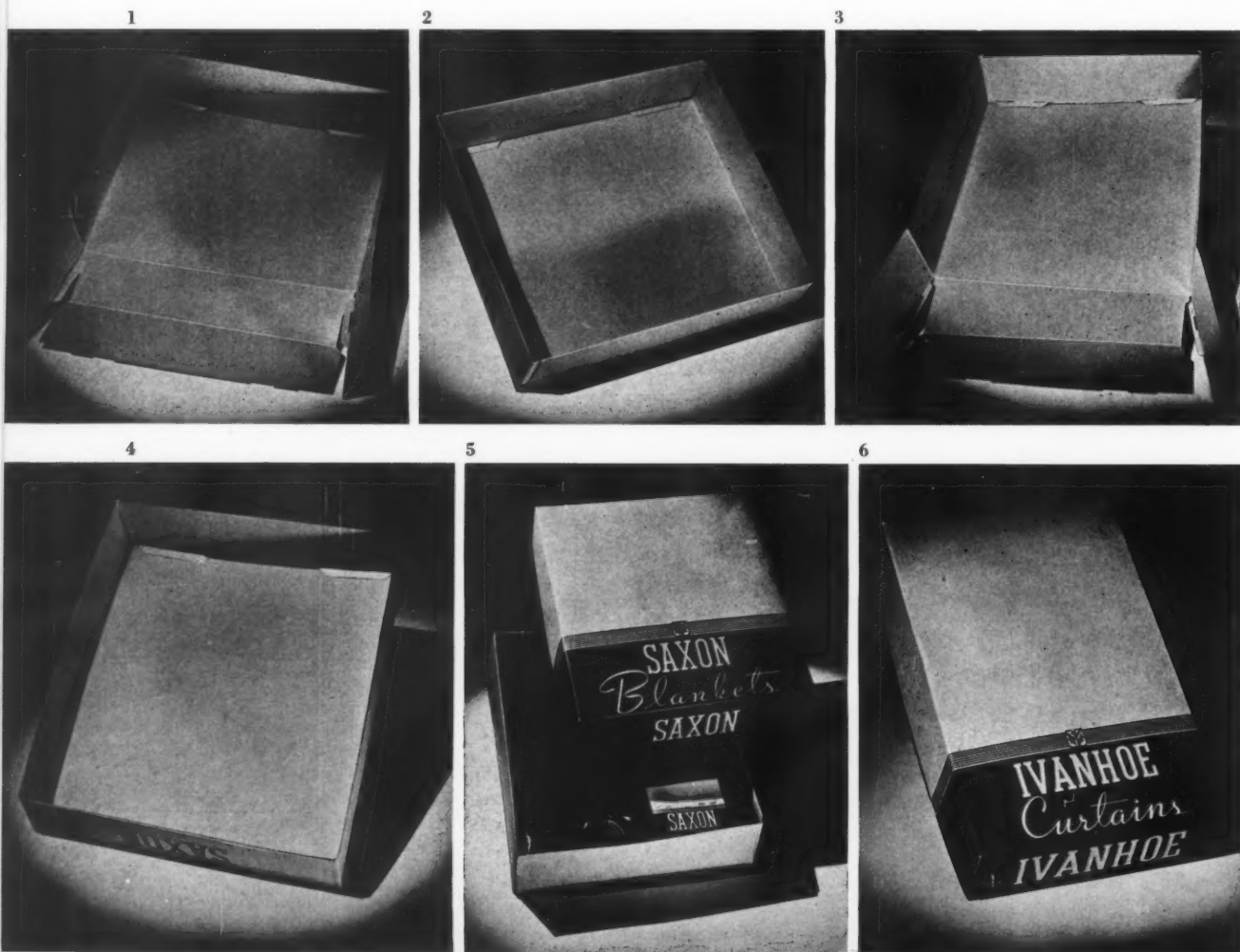
In this way, the boxes, when telescoped, have a double wall all around and there is no sacrifice of necessary board weight to withstand normal wear and tear, the company claims. The newly constructed box is said to be more rigid than previous construction and effects a saving of approximately 16 per cent in board tonnage. No changes in the preparatory set-up were required other than a minor patching of the reverse color plates which had been previously used

in printing the usual boxes of conventional construction.

Illustrations show basic construction of the Saxon blanket box. The curtain box has similar construction.

1. View of partially assembled bottom for Saxon blanket boxes with one side wall folded over and locked. The opposite side wall yet to be creased and locked into position. The loops which form part of the lock are cut from a portion of the side wall and thus eliminate board waste. The grain of the board on the bottoms runs crosswise with the bottom.
2. Assembled bottom of the blanket box shows full double side walls and single end walls.
3. Partially assembled cover with one end flap folded over and locked. The other end ready to be creased and locked. Here again, loops form part of the lock and are cut from a portion of the end wall. The grain of the board on the covers runs lengthwise with the cover.
4. Completely assembled cover shows double end wall construction and single side walls.
5. Completed blanket box shows cover with double end walls and single side walls about to be fitted over the bottom which has double side walls and single end walls.
6. Completely assembled Ivanhoe curtain box with cover telescoped over the bottom. This is exactly the same construction as the blanket box.

Credit: Boxes by Lindley Box & Paper Co. Labels by Foote & Davies and Arris & Co.



LITTLE THINGS THAT MADE A BIG DIFFERENCE



It was the accidental application of heat to a mixture of crude rubber and sulphur that led to the discovery of vulcanization by Charles Goodyear in 1839—and marked the beginning of the rubber industry in America.

And it was the impregnation of a rubber ring with a lubricant which works to the surface and thus prevents the rubber from sticking to glass, that led to the development of the Crown Slip Rubber Ring.

The efficiency of Crown Slip Rubber Rings is further improved by their sturdy thickness, which seals off any irregularities on jar sealing surfaces—and they never cut through.

By replacing two-piece caps with Crown Single

Shell Caps, this important sealing improvement has brought notable savings to packers of mayonnaise, preserves, jams, jellies, vacuum-packed coffee, tea and granulated products.

Available in Lug, C. T. and Mason caps. Samples, prices and complete information will be sent promptly upon request, without obligation.

CROWN CORK AND SEAL COMPANY
BALTIMORE, MARYLAND
World's Largest Makers of Closures for Glass Containers



SLIP RUBBER RING

One of the 7 Closure Improvements CROWN brought you **1st.**

*"Don't bother to wrap it
...it's in a carton"*

SAVE PAPER



A good idea... to take purchases in the manufacturer's folding cartons... It saves additional paper, and conserves the clerks' time. Why not mark them "save this carton for waste paper collection". Be sure your cartons do a complete and efficient job today.

● Uniform, rectangular cartons of Ridgelo clay coated board are indispensable to war time marketing. They protect the product from breakage, germs, dirt and sun—may be treated to help keep moisture in or out. Give your retailer these convenient sales units. Guarantee quantity and quality for the consumer. Prevent substitution!

Remember that the use of Ridgelo clay coated cartons may release other important materials for war service. Plain, printed, varnished, embossed, or gloss-brushed Ridgelo is a most attractive boxboard.

Your independent boxmaker is ready to cooperate with samples and plans for modern production, based on government regulations. Ask him for details!



MADE AT RIDGEFIELD, N. J. BY LOWE PAPER COMPANY

Representatives: E. C. Collins, Baltimore • Bradner Smith and Company and Mac Sim Bar Paper Company, Chicago • H. B. Royce, Detroit
Gordon Murphy and Norman A. Buist, Los Angeles • A. E. Kellogg, St. Louis • Philip Rudolph & Son, Inc., Philadelphia

MODERN DISPLAY



Units that made best sales records in 1941

Displays may be analyzed (a) from the viewpoint of their beauty and attractiveness; or (b) from the standpoint of their merchandising objectives; (c) from the angle of their basic appeal or "idea"; or (d) they may be considered in the light of their appropriateness to particular kinds of retail outlets. But there is one point of view which transcends all these, "Does it sell?" That angle is the basis of this review.

The responses to Modern Packaging's request for information about window or store displays which made the best sales record during 1941 brought many interesting replies and examples. Examination of these may lead to conclusions which will form a pattern for future activity.

(1) For instance, sometimes a departure from traditional paths pays dividends. The Sun-Maid Raisin Growers Assn., by their own confession, tired of trying to get display pieces set up in stores through the activities of retail specialty men,

hit upon their "Penny Pack" as a means of obtaining store display. At the same time they conducted a sample campaign on a very profitable basis. A package was devised to retail at 1¢. Several dozen of these packages were packed to a display container. This container readily found a place near the cash register because the copy on it read, "Take Your Change in Iron." Grocers welcomed it, and 20,000,000 penny packages were sold during the first 60 days following their introduction.

(2) Reports from Seeman Bros. field men indicated that their holiday counter display for White Rose Tea made the best sales record for them during 1941. They attribute this, at least in part, to the fact that dealers apparently were looking for materials to put on their counters which would give the stores a feeling of Christmas atmosphere. Possibly the new White Rose Tea package, with its accompanying



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advertising, was a factor; but this piece, they found, remained on counters two and sometimes three times as long as their average piece.

(3) The grocery store is no place for decorative frills. A display piece, it may safely be said, is seldom if ever put up merely because it is beautiful. If a product is colorful or has a colorful package, often of itself, it makes the most effective display, particularly if the dealer builds a mass display composed of packages. This was the principle employed by the American Molasses Co. with great success during the past year. Grandma's Molasses packages were redesigned late in 1940. The 1941 merchandising plans included dealer contests for store display. Some dealers were skeptical or at least curious as to whether these multi-colored labels would be effective in the mass display which is so dear to the grocer's heart. But experience proved that the variety of color shown on the actual packages, supplemented by package outserts and small posters, were able not only to hold their own, but also to establish new sales' records for the company's molasses.

(4) Store display can sometimes overthrow entrenched traditions. The Gebhardt Chili Powder Co. finds that one of the greatest obstacles which it must overcome is the retailer's impression that Mexican-type foods are predominantly winter foods and will not sell during the summer months. But a Piggly Wiggly store in San Antonio installed a mass display of canned Mexican foods, surmounted by a cut-out depicting a Mexican *señorita* in colorful *sombrero*. Used in this display were 2,016 cans offered at regular prices and the last can was sold within three weeks after the display was installed early in August.

(5) Sometimes an inspiration develops an idea with a far-reaching appeal for the consumer. Such was the Sunkist baby easel card used by the California Fruit Growers Exchange. Retailers reported that they had difficulty in keeping this display piece in the store because so many customers wanted to take it home with them. One grocer in Milwaukee kept track and found that 40 customers had asked for it. This easel card is so constructed that it can be used either as a



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MODERN PACKAGING



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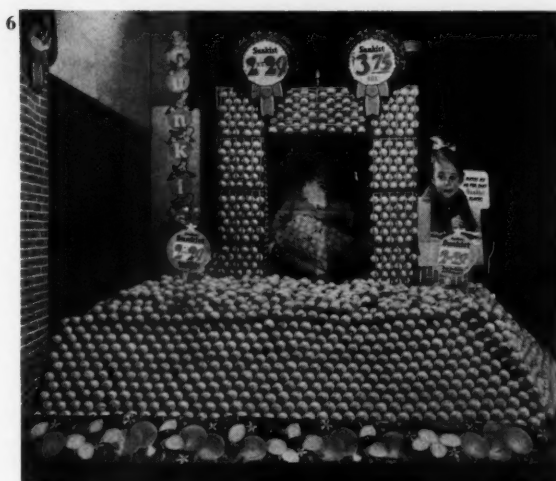
window display or incorporated in a floor display of the product. (6) The illustration shows a mass window display in an independent fruit market which made a very interesting sales record, reported to be a 240 per cent increase over a comparable period without display. In this particular instance, there were four factors which might account for the sales effectiveness: (a) the enormous mass of color provided by the product itself, (b) the price appeal, (c) the Santa Claus figure in the center and (d) the Sunkist baby.

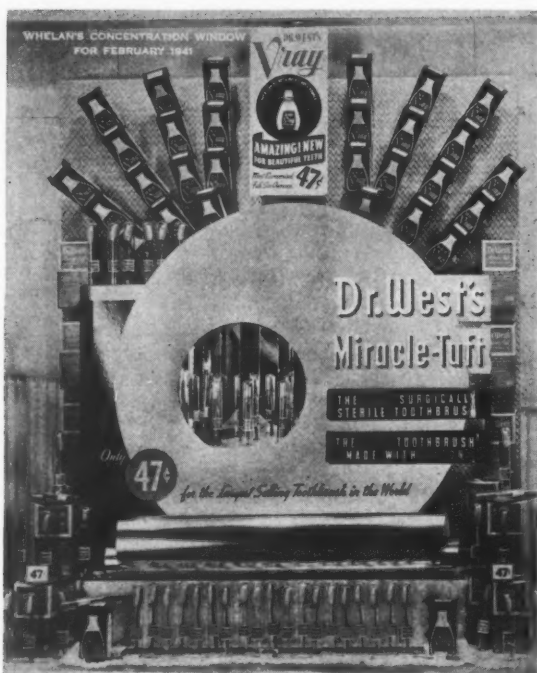
(7) People go for apples out on Chicago's Northwest side, particularly when dealers display them, although that is almost invariably the case anywhere, according to the Washington State Apple Assn. The "Family Market Basket," an independent retail store in Chicago, enjoyed a 223 per cent increase in sales, after installing a display within the store, as compared with a similar period without display. The fruit itself provided the appetizing color. Golden Delicious and Jonathan apples from Washington State were piled above lithographic material which pictured the peeping faces of eager-eyed youngsters.

The drug store incites the display creator to develop his finest creations. Factors which must be reckoned with are these: Ordinarily the druggist has a very high standard regarding the appearance of his store. Mass displays, which are so deservedly popular in food stores, occasionally win the approval of the druggist. He has more leisure to make the installations and to select material for installation. He has a great variety of products to choose from, usually a wider margin of profit—in short, there is greater scope for exercising discriminating intelligence as to the display materials which are sent him in tremendous quantities.

(8) Meeting the druggist's acid tests, Norwich Pharmacal Co.'s Pepto-Bismol window display makes sales through the the judicious use of humor. The "burpy" gentleman reminds us that we, too, may some time be in the same predicament. Then, on entering the store, we find the matter-of-fact product display makes it easy to buy. (9) The Norwich people report that many dealers used the window piece not once but several times, storing it carefully and bringing it out again for subsequent showings.

(10) Keen merchandisers of products sold through drug outlets make intelligent use of the tie-up between window





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display and counter dispensing unit, just referred to. Another example is afforded by Dr. West's Miracle-Tuft window displays, supported in the store by the very elaborate product dispenser which completes the selling job. (11) These pieces manifest recognition by the manufacturer of the fact that display is the vital link between consumer advertising and retail sales. Consistent use of these coordinated pieces has produced dealer profits on a scale which can be almost mathematically predicted. The interior store display, prominently located and kept stocked, has produced a sales increase of 32 per cent the first two months, 69 per cent the second two months and 74 per cent the third two months, according to Weco's records.

(12) The druggist has a strong professional leaning. This, coupled with his merchandising instinct, makes him welcome a counter display like the one provided by Becton-Dickinson & Co. to promote the sale of their clinical thermometers. Ordinarily, such an item is kept out of sight and only brought out on customer call, but by means of this convenient and compact counter easel the actual products in four different styles were displayed. Full protection was afforded by a transparent sheath of rigid drawn plastic sheeting. Over 10,000 of these display pieces were utilized in drug stores, to account for a very healthy sales volume.

Emphasizing the dealer help angle of displays, the Bristol-Myers Co. consciously plans its store material with a strong merchandising slant. Most successful of their 1941 pieces was the one which they called the "Men's Needs Display," reproduced at the beginning of this article, which in many instances induced the druggist to establish a department in his store devoted to toiletries for men, thus preventing this business from being diverted to other types of outlets. The copy on the lithographed center piece plays up the theme of good grooming for men. The side pieces are jumbo representations of Bristol-Myers packages. The accompanying product displays, which druggists were encouraged to make, consisted of any toilet articles for men regardless of whether Bristol-Myers produced them or not.

(13) Even though McKesson & Robbins enjoy an unusual relationship with their retail outlets, nevertheless, they find it pays to regard very seriously their responsibility for providing well-planned window material. With an attractive and efficient looking nurse as the human interest figure, a "triple way" display idea was developed which provided promotional help for three entirely different and unrelated lines of merchandise of varying seasonal demand. Designed

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primarily for window display, the construction was also adaptable for creating a special sales counter trim. Tiers of display shelves permit utilizing large quantities of actual products, easily changed to promote sales of vitamin products, cough and cold remedies or general line of household drug needs. The arch construction features die-cut representations of drug store show globes, equipped with electric flasher illumination. The same basic lithographic material was thus used several times, suiting the convenience of the druggist and retaining window space for McKesson products.

Competition for display space in liquor outlets is particularly keen. For one reason, the liquor producers appear to be all on their toes to provide real sales helps; for another reason, in some states there are drastic limitations as to the kinds and sizes of materials which are permitted. As a result, the liquor dealer can select his display material from a veritable wealth of pieces which are available.

(14) Frankfort Distilleries, aggressive both as to amount and character of material provided to dealers, points each piece in a specific direction. Their Paul Jones display consisted of several pieces. The camel theme tied in with the

magazine advertising used for Paul Jones whiskey. Vertical and horizontal strips were usable either as window trim or for backbar decorations.

(15) Striking use of the time element as a shopping reminder was Glenmore's "How Many Days Till Christmas" calendar display, which built up a cumulative sales record prior to the holidays. Calendar pages could be torn off one by one as the great day approached. Chief figure was a friendly old codger right out of Dickens, laden with packages of Christmas cheer.

(16) The colorful and romantic figures of two Northwest Mounties on their beautiful horses draw all eyes to the Canadian Club display which was given the job of putting over the thought that Canadian Club is an imported whiskey. While the Hiram Walker organization doesn't keep books on individual display pieces, yet they credit this particular piece with an excellent sales record.

(17) Brown-Forman, whose top brand is Old Forester Whisky (their spelling always omits the "e" in whiskey) credit their "America's Guest Whisky" display with excellent sales-producing records. The piece was lithographed



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from a direct-color shot. Impression of excellence of the product is imparted by a simulated wood frame, bevelled to give a third dimensional aspect.

(18) It is an achievement for any product to rate a corner window in a Woolworth store. That is exactly what was accomplished by the Antique Map display developed by the National Licorice Co. This consists of an attractive three-panel window background and tells the interesting story of licorice with pictorials showing how licorice root is gathered and transported, supplemented by samples of the actual product in its various stages of manufacture, together with display cartons containing various forms of the finished product. Even retailers reported astonishment at the interest of the public in the story presented by this display.

(19) "Americana" pipes struck a responsive chord with a timely display installed in a Schulte window. This installation is given the credit for having sold, during its showing, the greatest quantity of dollar pipes ever sold during a comparable period since the store was opened 32 years ago.

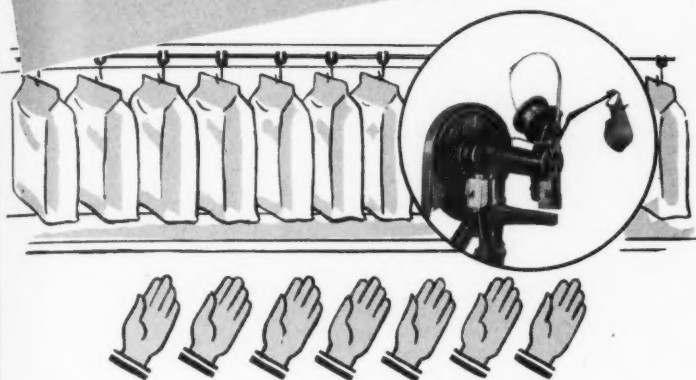
(20) Traditionally associated with Easter is ham. Kingan & Co. nominates as their most successful 1941 display a colorful set of material built around this central theme. Smaller accompanying pieces picture the product with full appetite-appeal. Comedy note is used in cartoon illustrations of very human looking hogs.

(21) Waitt & Bond, Inc., makers (Continued on page 98)

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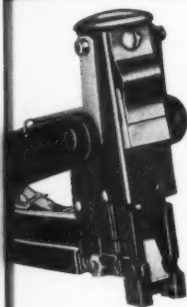
HANDS OFF!
Costs Down! Sales Up!



It's BOSTITCHING

A candy manufacturer used to insert candy bags for sealing, one by one, into a stapling machine. Working with Bostitch, this cost-cutting conveyor belt system was developed. Each bag, clipped to the conveyor, is sealed automatically as it passes under the stitcher head, while a Bostitch-engineered attachment simultaneously punches a hole in the bag for hanging on dispensing display.

BOSTITCH for Economy



ACCURATE but FAST!

These steel jaws CLINCH wire without breaking the glass!

Even fragile glass bottles can be safely stapled to a display card, as this highly successful display shows. Accuracy of the operation results from Bostitch engineering and precision manufacture throughout. Speed cuts costs, and the inconspicuous staples hold tightly but do not disfigure the card.



BOSTITCH for Protection

Shades of INGENIOUS, PRACTICAL Ben Franklin! One staple helps both product and package!

This kite had to be so constructed that a child could assemble it, yet *packaged* in such a way it could be shipped safely and economically to the retailer and conveniently carried home by the purchaser. A single strong staple placed diagonally around the kite sticks where they cross solved all these problems—for the kites could then be packed in one straight line and, being already partially assembled, were easier to sell. Have you a fastening problem?

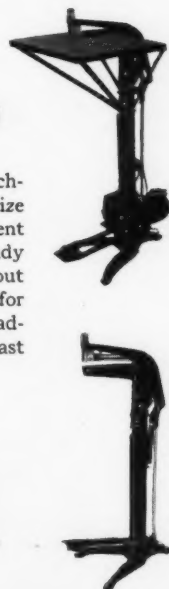
BOSTITCH

for Sales Appeal



Write for FREE fastening-analysis

Bostitching: using the right stapling, stitching or tacking machine, and the exact size or type of staple to get the most efficient fastening results. Let our engineers study your carding or packaging problem without cost or obligation. Send samples of work for **FREE FASTENING ANALYSIS**, addressing Bostitch, 52 Duane St., East Greenwich, Rhode Island.



BOSTITCH

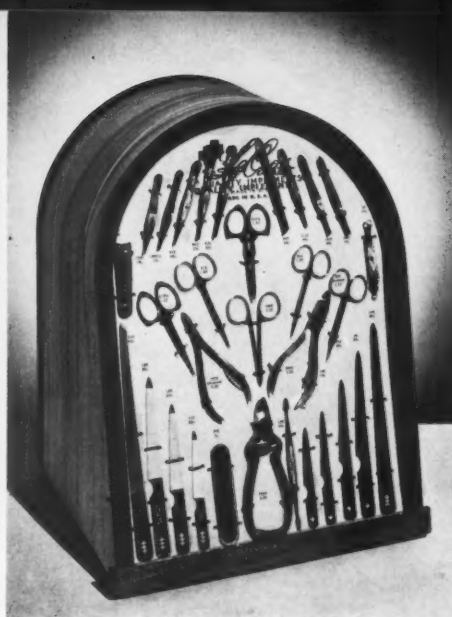
Fastens it Better
... with Wire

STAPLING...STITCHING

TACKING



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1 An outstanding point-of-sale display is the clever hand holding one of the Prince Gardner billfolds. The hand is made of a plaster composition, indicating an excellent usage of available materials. It is tinted to resemble flesh and is effectively life-like. The unit is 10 in. high and the hand is specially slotted to accommodate a billfold. Its sturdy construction will assure long use. Made by Fixture Products Co.

2 Schnefel Bros. Corp., makers of La Cross manicure assortments, state that they have found counter display units of this kind to be the most practical and successful means of displaying and selling their type of merchandise. Each year the company brings out a new cabinet with definite improvements over the last year's model. This latest model definitely takes the manicure implement line out of the hardware class and positions it with prominent display in the toilet goods department, where the manufacturers believe it rightfully belongs. Cabinet made by Regent Specialties Co.

3 Six O'Clock Co. has solved a display problem with a new counter unit for showing its 6 O'Clock Tapioca and 6 O'Clock Desserts. Stacked on shelves of the super-markets and other grocery stores, the boxes were lost in a medley of similar packages. This display piece was evolved which takes up very little counter space and as the individual flavors are sold, re-orders by the dealer can be adjusted to meet the current demand. The display is made with special regard to economy in material, engraving and printing cost. Designed and made by Robert Gair Co., Inc.



6

4 "Great for 2 Big Reasons," reads the Hiram Walker display for its Imperial whiskey. The two big reasons are pictorially illustrated as elephants performing in a circus act, two huge bottles of whiskey held by their trunks. A giant-size bottle of Imperial balances the other side of the poster. The unit is done in full color and has an easel back support. Made by Ketterlinus Lithographic Mfg. Co.

5 In view of the fact that approximately 50 per cent of all accidents happen in the home, the object of this window display for Bauer and Black surgical dressings was to depict the various circumstances surrounding accidents in the home, incidents that would attract the average passerby as being a "it could happen in our house" version of their daily lives. Clever construction of the home and the people in it gives to this cardboard window piece the features necessary to take it out of the ordinary. Made by Zipprodt, Inc.

6 A former pasteboard carton used by Heller Bros. Co. for its hammers is replaced by this combination display box and shipping carton which holds 12 carpenter's hammers. A patriotic color scheme is utilized which captures the attention immediately. The standing advertising panel was purposely designed as a separate unit to facilitate packing flat in a regular slotted box for shipping purposes. Each hammer rests in a separate compartment, formed by a scored sheet of corrugated board, die-cut to hold the hammer. Made by The Hinde & Dauch Paper Co.

7 Here is how Richard Hudnut makes its packages an integral part of a display. By clever arrangements and backgrounds, the company rings innumerable eye-catching changes with its standard packages and makes them into fine display pieces. In this group, bottles of cologne and boxes of powder are placed in a springtime setting of a yellow straw hat and a basket of lilacs.

8 This entire display is made out of one piece of cardboard—an exceptional type of construction with three planes, shelves and cutout shapes. But Scotch Tape wanted four points emphasized in the one-piece display with the major picture that of a girl mending a torn page. The sealing, mending, holding and fixing qualities of the tape are all dramatized by using hands, showing the various applications. Made by Continental Lithograph Corp.

9 A counter dispensing carton which takes advantage of the repetition of the trade mark on its individual packages is the carton for NR candy coated laxative tablets. The bottom of the carton has two rows of slots into which the rectangular tins fit in a standing position. In this way, the packages themselves afford their own display. The lid of the carton folds back to show product and brand identification as well as price.

Display Gallery





WRAPPING MACHINES in the VICTORY PROGRAM

*They play an important part . . . Keep
them at top-notch efficiency*

A vast quantity of goods essential to the civilian population and our armed forces must be packaged . . . And with increased demand, steady, fast production is more important than ever.

With our nation-wide service and offices located throughout the country, we are in a position to give you the skilled service that will assure highest efficiency . . . We can help you, too, in adapting your machines to new needs or different types of wrapping material . . . And we may likewise be able to show you how to *save material*.

NEW MACHINES

If you require new wrapping machines to meet new needs, don't hesitate to call on us—particularly if your production is essential to the Nation's war effort.

Our experience in assisting manufacturers to overcome present packaging problems may prove of value to you. So why not bring your problems to us? Our nearest office is there to serve you.

PACKAGE MACHINERY COMPANY, Springfield, Massachusetts
NEW YORK CHICAGO CLEVELAND LOS ANGELES TORONTO

Mexico, D.F.: Agencia Comercial Anahuac, Apartado 2303

Buenos Aires, Argentina: David H. Orton, Maipu 231

Peterborough, England: Baker Perkins, Ltd.

Melbourne, Australia: Baker Perkins, Pty., Ltd.



PACKAGE MACHINERY COMPANY

Over a Quarter Billion Packages per day are wrapped on our Machines

PACKAGING PRODUCTION and TECHNIQUE



To suit buying habits of Latin Americans, Carter's pills have been packed in small cellophane packets, four to six pills to a packet. Twenty-five packets are then put into a small display carton. Four of these cartons wrapped together in cellophane make units of 100 packets, so that inventory can be kept by international metric system.

South American way for Carter's pills

Carter's Little Liver Pills are known all over the world. For years they have been sold in glass vials, each containing 40 pills and bearing a familiar red label.

These packages enjoy steady demand in the United States, but a year or so ago, the company noticed that they were faced with keener competition in Latin America. Similar products of local manufacture were out-selling Carter's pills in many Latin American countries.

A check-up with dealers showed that the trouble was not with the product, but that the difficulty was a packaging problem. A package which was all right in the States was not altogether suitable for the South American way.

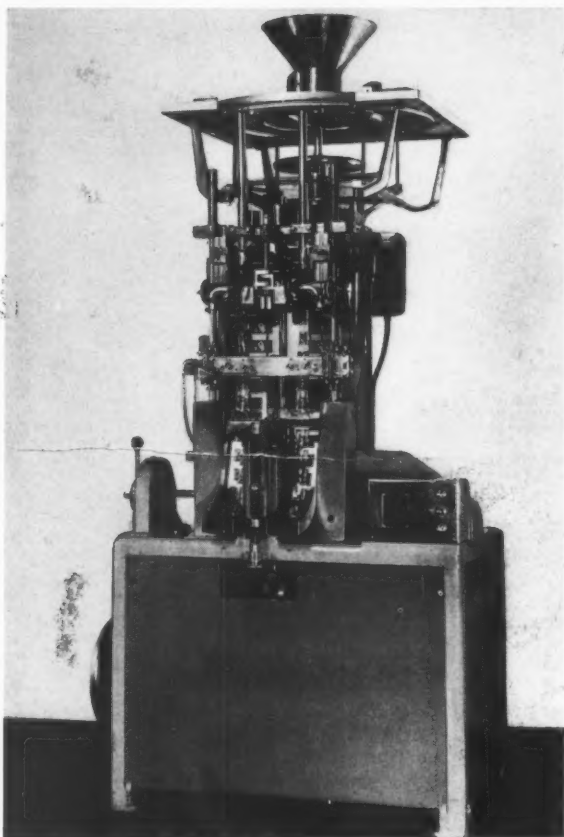
The average income level of the South American population is not so high as it is in the United States. Therefore, a package of 40 pills was too much for the average Latin American pocket book. The South American was buying pills in packages of smaller units—four or six pills to the package—which were selling for the equivalent of a few cents in our money.

The problem, therefore, was to devise a package to meet

this requirement. It had to be (1) inexpensive, (2) easy to ship, (3) light to stand heavy import duties based on weight, (4) to withstand all kinds of temperature and moisture conditions—the cold of the mountain districts of Chile as well as the tropical heat and humidity conditions of the Caribbean.

After consideration of all applicable methods of packaging the company decided in favor of a small packet—printed, moisture-proof cellophane envelope about an inch and a quarter square, containing 4 pills each.

This type of package met all the company's requirements. It is inexpensive because it can be assembled and filled automatically at high speed in one operation. It is very light in weight—cartons of 2,500 packets weighing only 13 lbs. and thus inexpensive to ship. The packets are small and compact, which means they occupy a minimum of shipping space in the cargo hold of a ship—an asset particularly at this time when there is a shortage of shipping space. They are not easily broken and their moisture-proof cellophane wrap protects them against all kinds of temperature and moisture conditions.



Pills are put into packets by a completely automatic machine, which counts the pills, forms a continuous tube of transparent sheet, cross seals and crimps, top seals and severs the completely filled packet in one operation.

The pills are packaged by means of a machine which counts the pills, forms a continuous tube of transparent sheet, cross seals and crimps, top seals and severs the completely filled packet in one operation. The pills, which are delivered to the packing machine from the factory in large metal drums, are emptied into a hopper at the top of the machine. They are counted mechanically by means of a small disk containing four holes, which allows only four pills to pass from the hopper at a time—four for each packet. The cellophane is fed into the machine from rolls at the back. Two rolls go through the machine simultaneously thereby making it possible to complete the packets two at a time. Production of 50,000 of such packets is possible in a day's run.

Completed packets are dropped from the wrapping machine into a bin. From there they are taken to a table where they are put into small folding cartons. These cartons are so designed that when opened, they form a counter display dispenser.

Twenty-five packets go into each of these display cartons. Each carton is then machine wrapped in transparent cellophane. Four of these cartons are again machine wrapped in cellophane to make a complete unit containing a total of 100 packets. This plan of wrapping the packets in units of a hundred is also an innovation. International shipments are counted by the metric system, rather than by the gross.

Therefore, 100 packets to every wrapped unit of four cartons not only simplifies inventory of the merchandise, but facilitates setting of price scales in the 20 Latin-American countries where the pills are sold. Twenty-five of the units containing 100 packets each are packed by hand into corrugated shipping cartons, stenciled for trade identification and containing a total of 2,500 packets. Thus, a simple counting of the corrugated shipping containers easily gives the total number of packets in a shipment.

So far the company has filled the cartons and shipping containers by hand. No conveyor system has been used between the machine operations. This may come later, when demand requires greater production facilities. To date, the company reports the first shipments to the South American countries have been meeting with excellent success.

This whole packaging program is in line with the modern trend of closer trade cooperation with South American countries and the Good Neighbor policy of the Western Hemisphere. It shows how American companies, doing business with Latin American countries, are studying the various market conditions and buying habits in these countries, so different from those in the States, in an effort to fit their sales programs into the needs of those countries.

The careful attention given to the detail of these new packages for Carter's Pills is a big step in this direction and a very progressive move in comparison to the way many companies used to send their merchandise to South America.

For example, there is a classic story about one manufacturer who, some twenty years ago, sent a large order of small merchandise to a certain Latin American company. The articles were excellently packed from a protective standpoint in huge strong wooden cases that would stand the wear and tear of the long journey by railroad and ship bottom. They arrived in excellent condition, but when the people who purchased the shipment saw them they were mad as hornets. The merchandise had been ordered for use in a remote mountainous region. The only way to get it to this remote place was to carry it through the mountain passes on the backs of little burros. In order that these little animals might bear the load, the cases all had to be opened and the contents transferred into smaller containers.

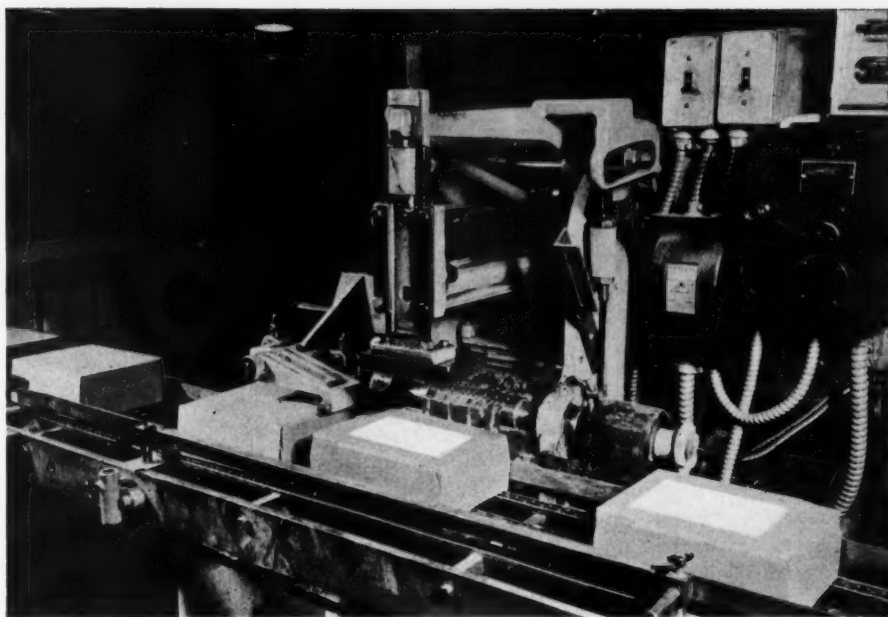
This was costly procedure for the South American distributor and it wasted a great deal of time between the arrival of the merchandise in the South American port until it reached the consumer. It all could have been avoided if the sender had taken the trouble to find out about local situations, or if the salesman who took the order, could have informed his home office of the need of correct packing. Many otherwise friendly trade relations and many sales in the past were lost just because of such lack of attention to details.

Today such things are not happening. American companies are studying their markets in foreign countries as carefully as their domestic ones.

Packaged goods, like the Carter's pills, are being put up in units specifically designed for the local conditions and buying habits of those markets, printed with informative data, directions for use, etc., in the language of the country where they are to be sold.

Credit: Cellophane by E. I. du Pont de Nemours & Co., Inc., and printed by Milprint, Inc. Cartons by Shuttleworth Carton Co., Inc. Corrugated containers by Hinde & Dauch Paper Co. Packet wrapping machine by Stokes & Smith Co. Carton wrapping machines by Scandia Mfg. Co. and Miller Wrapping & Sealing Machine Co. Assembled by Trans-Pac Services, Inc.

This machine labels thousands of books each month, ready to be shipped to the members of book clubs throughout the country. An entire month's mailings for Country Life Press to its book clubs are completed by the machine in only ten days' time, which represents great saving of both time and labor.



Machines speed book-club mailings

Companies who face labeling problems for mass mailings of cartoned merchandise which must be labeled and handled quickly will find a suggestion for the solution of their problem in the experience of Country Life Press with the handling of mailings to members of the currently successful book clubs.

This company which distributes books through the Literary Guild of America faced a real labeling situation in the packaging and shipping of their books once a month. The same service performed for the Doubleday Dollar Book club called for even greater efficiency in the handling of mailings. These mailings were scheduled for definite dates; therefore required quick handling within record time.

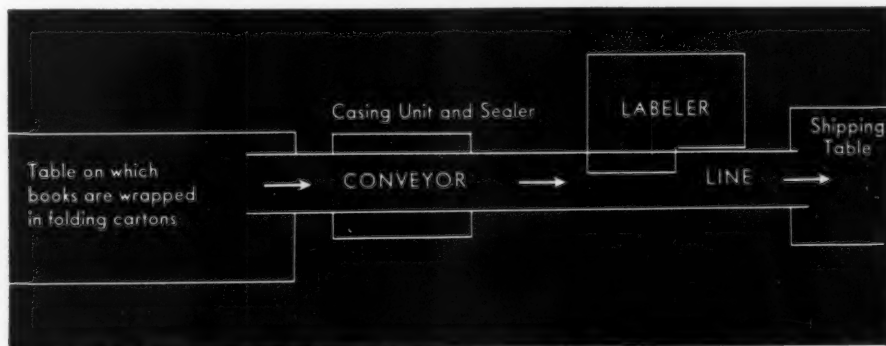
Country Life Press approached the problem on the basis of completing the entire mailing of a month in ten days' time. This has been accomplished by the installation of a casing and sealing unit, pallet book conveyor and labeler.

Books destined for shipment are slipped into folding cartons at one end of the conveyor line. The casing and sealing unit applies the adhesive and the pressure to seal the package. The packaged books then move along the conveyor line (see diagram) to the fully automatic labeler, where the previously stenciled labels are applied, and thence to the shipping table.

It is estimated that the new equipment represents so great a saving in cost that the labeler, alone, manages to pay for itself although used only one-third of the time. Since the demand for books and the monthly service has more than doubled since the installation of the labeling equipment, the savings are now about twice what they were before.

Credit: Folding cartons by Shuttleworth Carton Co., Federal Carton Co., and Grand City Carton Co. Casing and sealer unit, also conveyor, by Standard-Knapp Corp. Labeler by New Jersey Machine Co. Labels by Country Life Press.

Diagram shows flow of books from wrapping table by conveyor through the casing unit and the sealer, then to the machine where the labels are applied and, finally, their arrival on the shipping table.



Roll leaf hot stamping and embossing

by Alfred A. Morse*

THE roll leaf hot stamping process, introduced over twenty years ago, was at first confined almost entirely to book covers, flat leather articles, hat and shoe leathers, tops of candy boxes, etc.

Since that time many million feet of roll leaf have passed under the heads of stamping presses and this process is now being used to mark and decorate plastic products of all types, combs, tooth-brushes, pencils, wooden handles for brushes and tools, badge ribbons, greeting cards, advertising novelties, and hundreds of other products in many materials—even to metal with a heavy coating of enamel.

The types of presses used in this process fall under three general classifications: 1) Platen presses (Chandler and Price, Brandtjen and Kluge, Colt's Armory); 2) Bookbinders' presses (Sheridan, Seybold); 3) Specially designed upright presses (Peerless). The first two types must be equipped with a feeding attachment for the roll leaf before they can be used for hot stamping, but the Peerless press has such an attachment incorporated in its design. All types of stamping presses require a steel or brass stamping or embossing die, an electric heating plate, and a roll of stamping foil in the required width.

For ordinary flat stamping not much make-ready is required. Where embossing is desired, the make-ready is cut on the bed of the press. This is a skilled job but it can be learned easily by the average operator after a little instruction.

The stamping operation itself is extremely simple. A roll of foil is fed across the face of the heated die and with each operation of the press, the design or lettering

is stamped or embossed into the surface of the material in the color of the leaf. No drying time is required. Leaf is available in several shades of genuine gold, imitation gold and silver, and a full range of plain and metallic colors. If they do not interfere with each other in the design, two or more colors can be stamped at the same time from separate rolls of stamping foil.

Probably the greatest development in the industry has been the specially designed press, such as the Peerless, which is used exclusively for roll leaf hot stamping. It is an upright model available in many types from hand-operated to fully automatic. Some presses can be equipped with special feeds which bring the work to the press to be stamped.

The cost of the stamping foil is very little—approximately one cent for thirty to sixty square inches. It is available in widths up to 24 in. and is supplied in rolls that are generally 200 ft. long, but also in special lengths as well. The steel or brass dies are relatively inexpensive and good for thousands of impressions. The roll leaf process avoids the need for sizing and bronzing. In one operation, it applies the foil and embosses the design into the surface of the paper.

Adaptation of process

Box tops and wraps take the embossing operation after all the printing has been done, usually on a platen press of the Thomson-National, Chandler and Price, or Brantjen and Kluge type, equipped with a feeding attachment for the roll leaf and a heating plate. A combination brass die is made for whatever is to be embossed in roll leaf, designed to release the foil and emboss the surface in one operation. The roll of foil passes across

* Peerless Roll Leaf Co., Inc.

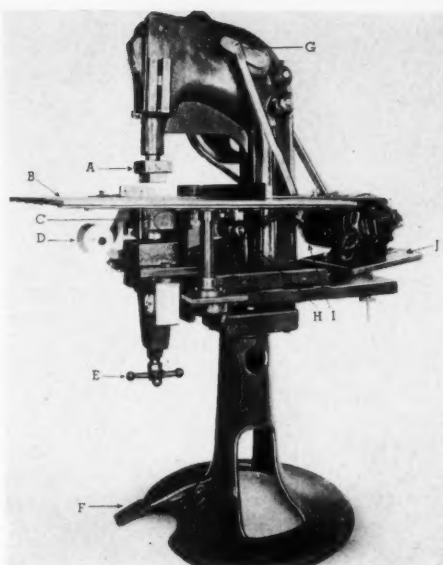
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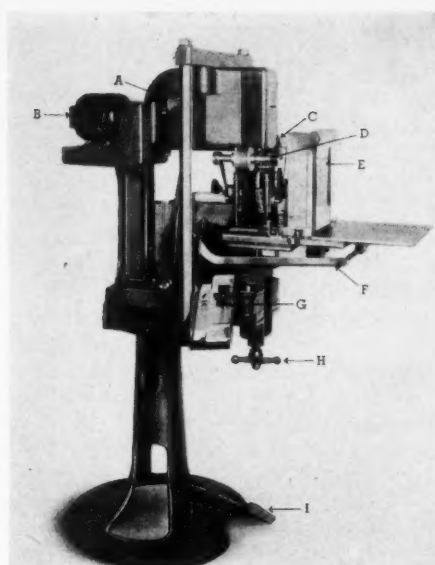
1. A group of articles which have been printed by roll leaf stamping. Leather, paper, plastics, ribbons, wooden handles of brushes and even metal pieces may be decorated by this process.

2. Hot stamping press for gift boxes.

A—head plunger; b—work table; c—heating block; d—roll leaf holder; e—adjusting screws; f—foot pedal; g—roll leaf cam; h—roll leaf holder; i—Reeves variable speed pulley; j—motor adjusting table. 3. Press used for carton blanks.



2



3

the face of this heated brass die and with each operation of the press, the foil is transferred from the paper web to the surface of the box wrap.

Cartons: The roll leaf hot stamping process finds another application in the imprinting of cartons. Ordinarily the imprinting of cartons of all sizes with additional data, such as numbers, models, sizes, types, etc., creates a problem. Quantities required must be estimated in advance and large stocks of folded and pasted blanks must be carried at all times by the manufacturers. When the imprinting is done by the roll leaf hot stamping process, this is all avoided. The manufacturer buys only one type of blank in each size. As special imprinting is needed, a supply of the folded and pasted blanks is placed in the hopper on a carton-imprinting press, stamped automatically, and ejected down the chute. Since no time is

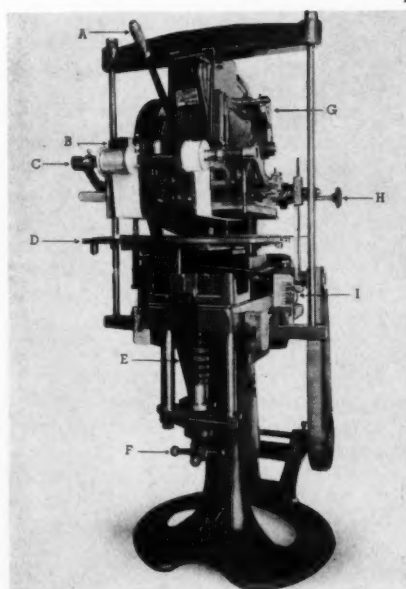
required for drying, the stamped blanks can be used immediately in packaging operations.

Plastics: The marking or decorating of plastic articles with roll leaf creates certain types of problems because of the nature of the material being stamped. Special presses have been developed for this purpose and the use of steel dies and high pressures allow the satisfactory stamping of very hard material. The roll leaf hot stamping process has been applied successfully to the stamping of plastic closures.

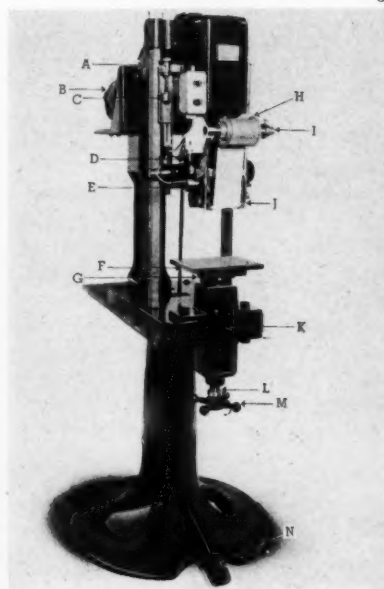
Wood: Articles made of wood, tool handles, for instance, lend themselves admirably to this process. Flat or curved surfaces offer no difficulty at all as the originators of the roll leaf hot stamping process have developed special equipment for the stamping curved and cylindrical surfaces, which opens a new wide field.

4. Press for papeterie box tops.

A—trip lever; b—heat control; c—roll leaf holder; d—hand slide table; 3—tension spring; f—adjusting nut; g—brake; h—roll feed adjusting wheel; i—roll feed adjuster. 5. For stamping tops of plastic cases. A—brake; b—motor; c—roll leaf adjuster; d—roll leaf attachment; e—heating head; f—work table; g—table support nut; h—roll leaf; i—roll leaf holder; j—breaker bar; k—table support spring; l—tension spring screw; m—table support adjusting wheel; n—foot pedal.



4



5

Packaging show geared to the changing tempo

"If we could only get materials." . . . "If we could only find substitutes." You hear such words on street corners, in restaurants, in hotel lobbies, on trains, in planes—everywhere business men get together.

It has obliterated the happy-go-lucky air of the salesman and is substitute itself for the former query, "Have you heard this one about the salesman and the farmer's daughter?"

The effect of total war has penetrated deeply into the warp and woof of American industry. Yet the country is still in a transitional stage—getting along on existing supplies—profoundly puzzled about future production schedules.

The accelerated tempo of the quest for material substitutes and for more efficient technique will color the entire Packaging Exposition, according to advanced reports received by the American Management Assn. from exhibitors in this show to be held at the Hotel Astor, New York City, April 14 to 17.

At this show you will see the latest possible developments. You will meet old friends with problems similar to yours, have a chance to find out how they are doing things, have a chance to talk with specialists conversant with every field of packaging who will be there to help you with your problems. And you'll feel better for being there when you learn that everyone is in the same boat. It's a show you can't afford to miss.

Significant substitutes

The resourcefulness and ingenuity that have characterized packaging during the past two decades are making themselves felt in this research, according to the association, although actual accomplishment, save in a few instances, has as yet not been notable. The association points out, however, that, on the one hand, the stern facts of the war economy themselves impose drastic limits on such accomplishment and that, on the other hand, the results of research activities may not become apparent for some months. Several supply companies have advised the association that they anticipate sufficient progress will have been made by early spring to enable them to utilize the Packaging Exposition as a springboard for the announcement of successful development of substitutes and processes.

The American Management Assn. cites as significant the fact that manufacturers of packaging machinery have been particularly numerous in reporting successful measures of substitution in their equipment.

"In some cases," reports a manufacturer of labeling machinery, "we have had to convert from aluminum castings to cast iron parts and increase structural strength of machine to handle this additional weight. In some rare cases this had interfered to some extent with speed possibilities on some equipment. We have been experimenting with substitute materials and with a certain amount of success. Two of the items which we use a great deal are bottle supports, for the semi-automatic machines, and solid label hoppers, both made of metal. We have developed a means of molding these from plastics and are seemingly getting very satisfactory results."

This same manufacturer adds that "bronze or brass are, however, giving us more concern. Where we've got to use materials that will not corrode under both alkaline and slight acid conditions, we can see that we might be up against a rather serious problem in time to come."

Another manufacturer of machinery said:

"Substitute materials of various kinds are being used, but the present and impending shortages are so numerous and include such fundamental materials as rubber, steel, copper and brass, that the construction of machinery is bound to be very limited."

An interesting sidelight of the reports made to the association and one that suggests highly interesting if limited possibilities is found in the comment of a manufacturer of a special-purpose wrapping machine who, after observing that some machinery was still to be had from stock and that deliveries were being made in from 90 to 120 days, added that "we can provide a wrapping service on the machinery on our floor if machines will not be able to be provided."

What materials for display

From display manufacturers news was received of interesting developments, one in the direction of substitute materials, the other in ingenious conservation of materials. A manufacturer of wire displays reports:

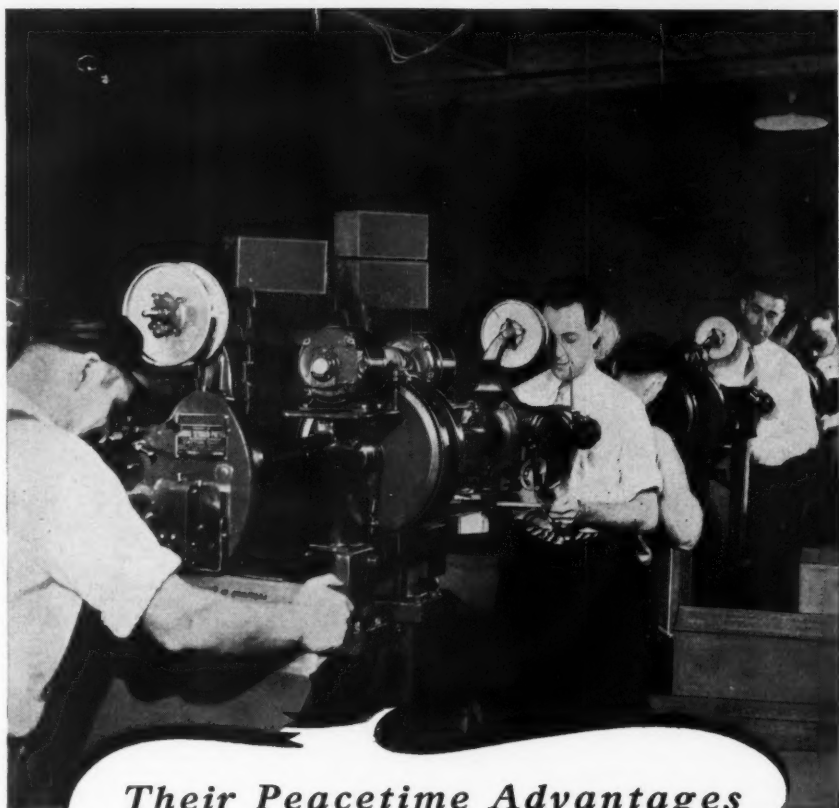
"It has become necessary for us to search for substitutes for signs because sheet metal is quite a valuable item and has been used almost entirely for signs in the past. We are at the present time experimenting with several substitutes for sheet metal signs and will have information on this available at the time of the Packaging Exposition."

A company producing lithographed displays reports the development of several ingenious methods of saving board and paper without impairing the qualities of the display. One involves the stapling of an additional sheet on a mounted display. When this sheet has served its purpose, it can be torn off, providing a new display. Another involves a display panel printed on both sides, set up on a detachable easel, so that after one side has been exhibited for the desired time, the panel can be reversed in the easel. A third employs a strip of board at the top and bottom, instead of using board for the entire area. The easel is designed to create tension and keep the paper panel smooth.

Conservation

Evidence of response to the widespread urging for conservation measures finds reflection in some of the reports received by the association. One manufacturer of gummed tape discloses a campaign on his company's part to conserve tape through the systematic reduction of tape widths, through the elimination of wasteful tape sealing practices and through the re-use of corrugated and fibre containers.

In pleasant contrast to the evidence of widespread wrestling with the acute problem of materials shortages, a surprisingly large percentage of the companies reporting to the association state that their products are readily available currently and that they do not anticipate serious curtailment in the immediate future. In such cases, their products are an integral and important part of the packaging picture and in some cases present possibilities as substitutes for materials in which shortages exist or impend. Information about such materials will prove a valuable aid to all those in the packaging field.



Their Peacetime Advantages

SERVE WARTIME NEEDS

The need for speed in assembling and sealing corrugated and solid fibre containers is being met by SEYBOLD Morrison Wire Stitching Machines.

Up to 5 times faster than less efficient methods, wire stitching doubles the strength of seals. Wire stitches are moisture proof and resist pilfering.

In addition to those advantages, wire stitching saves on material costs. (Wire stitches cost only 3¢ to 5¢ per thousand.)

SEYBOLD Morrison Wire Stitching Machines are now equipped with the exclusive Type-SL Head that raises wire stitcher efficiency, economy and durability to new, high standards.

In peacetime or wartime, the many exclusive advantages of SEYBOLD Morrison Wire Stitching Machines merit careful consideration.

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WIRE STITCHING MACHINES

U. S. patent digest

This digest includes each month the more important patents which are of interest to those who are concerned with packaging materials. Copies of patents are available from the U. S. Patent Office, Washington, at 10 cents each.

TRANSPARENT CONTAINER AND METHOD OF MAKING SAME. L. D. Hokerk (to Kerk Guild, Inc., Whitesboro, N. Y.). U. S. 2,269,201, Jan. 6. A container made up of upper and lower frames carrying a thin sheet of a flexible film which is transparent and impervious to liquids.

CONTAINER. H. F. Rigerman, Kenmore, N. Y. U. S. 2,269,785, Jan. 13. A container comprising a shell having a shoulder on its interior near each of the ends with a closure plate fitting in the shoulder made up of a metal plate, the sidewalls being constructed of fibrous material.

BOTTLE. J. H. Dowd (to G. F. Heublein & Bro., Hartford, Conn.). U. S. 2,270,277, Jan. 20. A bottle, cylindrical in form and notched on its outer face, with a sunken pocket of the shape of the label which it is to carry, for the protection of same.

COLLAPSIBLE TUBE. Hugo Mock, New York, N. Y. U. S. 2,108,689, Feb. 19, 1938. A collapsible tube having a cylindrical body with a rounded bottom closing the tube, the upper portion carrying the extrusion nozzle which forms part of the crimp closure element.

BOX. G. Scheer, New York, N. Y. U. S. 2,268,906, Jan. 6. A hinged box which may be closed, formed in two parts which, in the closing operation, telescopes the base into the cover while the handles register similar to a suitcase.

DISPLAY AND SHIPPING CONTAINER. A. J. McDonald, Watertown, Mass. U. S. 2,269,676, Jan. 13. A display and shipping container equipped with three rectangular trays one fixed, one sliding outward, while the third hinges upward forming the cover of the container.

DISPLAY CONTAINER. H. J. Fischer (to Gardner-Richardson Co., Middletown, Ohio). U. S. 2,269,715, Jan. 13. A carton adapted to containing and displaying articles, made up of a pair of box units arranged adjacent to each other with front, side and rear walls, equipped with flaps for locking the position of same. These two cartons have a common back arranged so that the cartons are at 90 degree angles to each other.

DISPLAY DEVICE FOR ARTICLES OF MERCHANDISE. H. L. Myers, Morristown, N. J. U. S. 2,270,079, Jan. 13. A display device containing two spaced openings shaped to fit the articles to be contained.

COLLAPSIBLE BOX. W. A. Ringler (to National Folding Box Co., New Haven, Conn.). U. S. 2,270,343, Jan. 20. A collapsible fibreboard box made from a single sheet cut with locking and flaps.

CARTON. W. C. Christy (to Industrial Patents Corp., Chicago, Ill.). U. S. 2,270,580, Jan. 13. A carton cut from a single blank equipped with interlocking flaps and scored lines, forming the edges of the box.

DISPLAY BOX. A. C. Beardsell (to Hinde & Dauch Paper Co., Sandusky, Ohio). U. S. 2,271,244, Jan. 27. A fibre container for shipping and display comprising a folding cover for advertising.

DISPLAY BOX. G. T. Henderson (to Hinde & Dauch Paper Co., Sandusky, Ohio). U. S. 2,271,258, Jan. 27. A fibre shipping and display container with removable front section and folding sidewalls and cover, carrying advertising matter.

METHOD AND APPARATUS FOR PRODUCING INDIVIDUAL TEA BAGS. S. R. Howard (to Pneumatic Scale Corp., Ltd., Quincy, Mass.). U. S. 2,269,532, Jan. 13. A machine for making individual filled tea bags from a roll of paper.

APPARATUS FOR MAKING AND FILLING BAGS. S. R. Howard (to Pneumatic Scale Corp., Ltd., Quincy, Mass.). U. S. 2,268,533, Jan. 13. An apparatus for making and filling bags, formed from a strip of sheet material.

METHOD AND APPARATUS FOR CLOSING AND SEALING PAPERBOARD, BOXES AND CARTONS. H. A. Carruth (to National Folding Box Co., New Haven, Conn.). U. S. 2,270,264, Jan. 20. A method of and a machine for closing and sealing cartons made from fibreboard.

CARTON SEALING MACHINE. M. P. Neal, Quincy, Ill. U. S. 2,270,329,

Jan. 20. An automatic machine for conveying, closing and sealing fibre cartons.

WRAPPING MACHINE. F. G. Cook (to Alexander Dittler, DeKaulb County, Ga.). U. S. 2,270,818, Jan. 20. A machine for rolling and wrapping superimposed sheets bound together at one end.

CARTON CLOSING MECHANISM. W. G. Kaliska (to Coca Cola Co., Wilmington, Del.). U. S. 2,270,820, Jan. 20. A device for supporting a carton and filling it with a set of bottles.

METHOD AND MEANS FOR APPLYING REINFORCING STRIP OR TAPE. V. G. Sigoda (to Man-Sew Pinking Attachment Corp., New York, N. Y.). U. S. 2,268,625, Jan. 6. A method of applying a reinforcing strip of sheet material for securing closures on to containers.

PACKAGE OF INTERFOLDED PAPER SHEETS AND DISPENSING WRAPPER THEREFORE. R. Ross, New York, N. Y. U. S. 2,269,039, Jan. 6. A package of interfolded paper sheets and a dispensing box to contain them.

CARBON PAPER CONTAINER. N. Fleischer, Brooklyn, N. Y. U. S. 2,269,525, Jan. 13. A container for loose paper sheets in packed form.

METHOD OF PACKAGING BOTTLE CAPS. W. A. Davis (to Smith-Lee Co., Oneida, N. Y.). U. S. 2,268,244, Dec. 30. A method for packaging bottle caps by forming a heat-sealing coating over the inner face of the side wall and the end closure closed at one end. The container caps are inserted and heated to a temperature sufficient to melt the coating. The other end is closed and similarly sealed.

MANUFACTURING WRAPPER BLANKS. J. W. Chalmers (to Molins Machine Co., Doptford, London, England). U. S. 2,268,474, Dec. 30. A wrapping machine with means for feeding a sheet of wrapping material and for applying tabs to the sheet at intervals. The tab projects beyond an edge of the sheet which is folded over the projecting parts of the tab against the sheet of material.

Another

COMPLETE PNEUMATIC INSTALLATION-

typical of the thousands of Pneumatic Packaging machinery installations operating in America today, producing packages to supply both the armed services and the civilian population. Hook-up includes Carton Feeder, Bottom Sealer, Net Weigher (foreground), Top Sealer and Twin Tight Wrappers.



AMERICA'S LEADING LINE-UP

FOR SMOOTH, SPEEDY PACKAGING

Fifty years ago Pneumatic began business on the policy of never building anything but the finest in packaging equipment. Design ingenuity, scientific selection of materials, precision machine work—Pneumatic set the highest standards in the field, and has adhered to them ever since.

That's the reason why, of the millions of packages that come out of America's leading plants today, the greater part is being handled on Pneumatic equipment. Pneumatic's

kind of quality consistently saves time, money, materials—day in, day out, year after year. Pneumatic's "lower cost per container operation" and skilled, speedy type of service has "sold" itself to American industry. Pneumatic builds more than eighty different machines, for practically every packaging need. Our engineers are always ready to give helpful advice and information on your problem, if you'll just send us the facts.

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Equipment and Materials



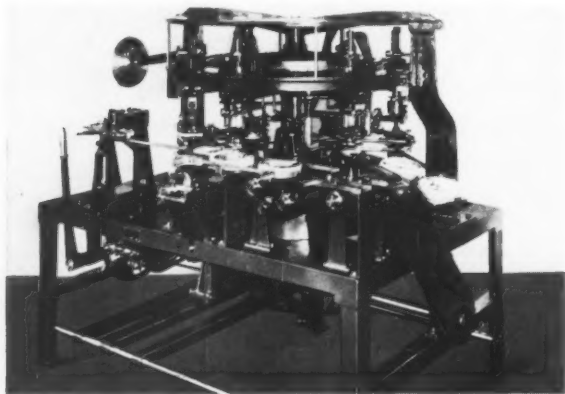
NEW CORRUGATED CONTAINER

The Simp-L-Ock Co. has developed a new type corrugated container, which is especially important at this time of shortages. Use of an ingenious snap-in top eliminates the need for staples, tape, glue, silicate and labels. This top may be removed by dealers to display merchandise to customer and then replaced without marring the appearance or strength of the package. This detachable top also permits imprinting of content information, thus eliminating labels.

The package is designed as an outside container to set inside a larger shipping package. Inasmuch as the closures are not stuck or stapled, the container cannot be sent through the mail or express without first closing the package in accordance with postal regulations. Although the top snaps into position, the container will hold up to 1 lb. per sq. in. before opening. An additional advantage is the ease of packing assembly line.

AUTOMATIC CAN SEALER

An automatic can sealer has been developed by the Minnesota Mining & Mfg. Co. which seals 40 to 100 cans per minute with cellulose tape, depending upon the size of the can. This sealer is used now for a large volume of tobacco tins and is highly efficient for sealing army ration, according to the manufacturers, as well as for coffee tins and for other types of telescope cans where preservation of moisture content or freshness is important. The tight seal of cellulose tape has proved remarkably successful in preventing moisture loss and in protecting contents against outside deteriorating elements, the company has found.



LABELING MACHINE

Designers for Industry, Inc., announce a new, improved machine for application of labels directly to cans, bottles and other containers, thereby eliminating the paper label and conserving paper for the war effort. The device, called the "Koloprint," automatically prints from one to four colors directly on bottles, cans, jars, tumblers or similar containers at about half the cost of present methods, according to the statement from the designers.

Two types of labeling are possible on the machine. One is permanent labeling and the other is labeling with washable inks. The latter process is especially valuable in cases where the bottle is returned and the task of sorting out a number of brands is more expensive than re-labeling. The machines can be used in the application of multi-color decorative designs or wording to cans of beer, fruit juices, meats, etc.; and to bottles for milk, beer, soft drinks, wines, liquors and similar beverages; to jars for creams, cosmetics, tobacco, etc. It incorporates an "electric eye" to prevent the device from printing on the seam of a can. Possible irregularities on the surfaces of bottles and other containers are taken care of by the soft nature of the synthetic gum plate, the designers state. This permits printing without blemishes on slightly irregular surfaces.

TRANSPARENT SHEETING

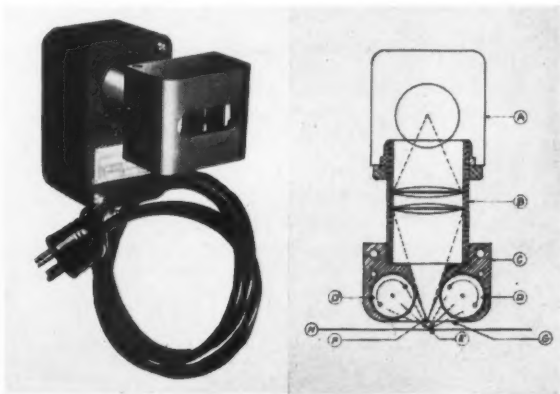
The Dow Chemical Co. announces that due to changes in its equipment Ethocel sheeting is now being produced in rolls approximately 28 in. wide instead of the former 25-in. width. This change has been made only on clear transparent material from .003 in. to .010 in. so far, but the company expects to extend the wider rolls to other grades at a later date.

SYNTHETIC RUBBER

Of unusual interest at this time when the government's restrictions on rubber make available substitute materials for rubber printing plates extremely interesting to the graphic arts industry, The B. F. Goodrich Co. has just issued a bulletin on "The Manufacture of Ameripol and Rubber Printing Plates." Ameripol is the name of the company's synthetic rubber used for plates.

ATTACHMENT FOR PHOTO-ELECTRIC AMPLIFIER

United Cinephone Corp. announces its new product, the Scanner, which consists of a light source and two photo-tubes in a single, compact housing, ready for attachment to any sensitive photo-electric amplifying system. Among its various applications are registration control from marks imprinted on materials such as cellophane, light or heavy opaque papers, cloth or metals; detecting absence or misplacement of labels on tin cans; for paper cutting or box folding. (See photo and diagram below.)



*"The time has come," the Walrus said
"To talk of many things..."*



OF SHOES, AND SHIPS, AND SEALING WAXOF CABBAGES AND KINGS!"

—Alice Through the Looking Glass, Lewis Carroll.
Courtesy of D. Appleton-Century Co. Inc.



What have all these topics in common? *Adhesives!*

In the manufacture of shoes—and innumerable other items of military equipment—adhesives and starches are highly essential.



Every ship—or tank, or plane—is made up of thousands of parts. In many of these, adhesives are an important ingredient—but *all* must be wrapped, packaged, or labeled with adhesives.



Sealing-wax suggests envelopes, paper, and documents. Paper in any form requires adhesives.



Foodstuffs are labeled with adhesives. The corrugated cases in which they are packed are made, sealed, and labeled with adhesives.



Dictators and emperors? Adhesives are helping put them out of business. Industrial materials are as important as shells and military equipment—and it takes adhesives to make them all!

When obtaining your priorities, don't forget adhesives. Our Priorities and Conservation Department will gladly give you any required information or assistance along these lines.

NATIONAL ADHESIVES

DIVISION OF
NATIONAL STARCH PRODUCTS Inc.

820 GREENWICH STREET • NEW YORK

Plants and People

George A. Mohlman, vice-president of Package Machinery Co. since 1919, was elected president of the company recently. Mr. Mohlman succeeds Roger L. Putnam, who was named chairman of the board. Also elected were four new vice-presidents as follows: Roe S. Clark, who continues as treasurer of the company; E. Lovell Smith, chief engineer, who becomes vice-president in charge of developments; Tom Miller, who becomes vice-president in charge of sales; and George C. Ferver, assistant to the president.



George A. Mohlman

Mr. Mohlman, the new president, is one of the directors of the Packaging Institute and a member of the Packaging Exposition Executive Committee.

J. Henry Richmond has been named president of the Potdevin Machine Co. He succeeds his father, Julian Richmond, president of the company since 1919, who, as chairman of the board of directors, will continue in active service.

Corporate name of Sawyer Displays, Inc., was changed to Durham Displays, Inc., at the annual meeting of the board of directors. This Durham, Conn., firm designs and manufactures wood, metal and plastic counter and floor display stands, industrial exhibit booths and merchandising units. New officers are Vincent J. Kay, president and general manager; Walter Boyden, vice-president; John Barhydt, secretary.

The B. F. Goodrich Co. has combined its former mechanical goods and sundries sales divisions and given it a new name—the Industrial Products Sales Division—it is announced by W. S. Richardson, division general manager. The organization set-up under the new policy is as follows: B. F. Stauffer, division assistant general manager in charge of Miller plant activities; L. H. Chenoweth, manager, manufacturers' sales; C. F. Conner, manager, distributor sales; C. O. Delong, manager, operations.

Theodore De Cue Palmer, assistant advertising director of *The New York Times*, has resigned to become president of Ruckelshaus & Co., Inc., creators, manufacturers and distributors of animated displays for national advertisers under the Ruckelshaus patents.

Roger A. Bailey has been appointed sales manager of the Adhesive Division of Certified Products Co.

I. Willard Crull of the Campana Sales Co. is the new president of that organization. Formerly, he was vice-president and director of advertising for the company.

Crown Cork & Seal Co., Inc., celebrates its Golden Anniversary this year, having been established as a firm in Baltimore, Maryland, in 1892.

Dr. C. O. Ball, long prominently identified with scientific research in the food processing field, has joined Owens-Illinois Can Co. as technical director, according to an announcement today by Frank Nesbitt, vice-president and general manager of the firm.

Inland Steel Co. has begun installation of an electrolytic tin coating plant at its Indiana Harbor Works. These new units will take care of the tin plating of approximately 2,000,000 base boxes of tin plate per year. The new electrolytic process produces a very even coating of tin which is an important factor in the saving of this metal. The new equipment is being installed to help overcome the threatened shortage. In addition, and also as an aid in conserving tin, the company has contracted with the Wean Engineering Co. for the manufacture of a bonderizing line for black plate for use in the canning industry. Manufacturers of cans expect to be able to use a considerable quantity of bonderized black plate which they will coat with protective lacquer. They expect that this bonderized black plate may be used for many applications as a substitute for tin plate. In some instances the ends of cans may be made of black plate even though it may be necessary to make the body of tin plate.

C. W. Hering, paperbox manufacturer, 1922 South Los Angeles St., Los Angeles, has just signed a 10-year lease for a new location at 2419 South Grand Avenue in that city.

Economic Machinery Co. announces the appointment of Sidney T. Carter as chief engineer. Mr. Carter was formerly development and research engineer for Schenley Distilleries, Inc. He is well known for his achievements in the development and improvement of bottling machinery. He will be located at the company's main office at Worcester, Mass., and will be available for consultation and advice on labeling problems.



Sidney T. Carter

Robert M. Macy and Glenn Mather of the OPA and William Fitzhugh of the Container Division of WPB conducted meetings in New York and Chicago, February 10 and 12, to present price control agreements for manufacturers' voluntary acceptance in the set-up and folding paper box industries. Base period for computation of conversion costs, overheads, profits, etc., for both industries is to be October 1, 1941, to October 15, 1941, or for the nearest representative two-week period prior thereto, for products manufactured in the same or in a similar manner. The government officials stress the fact that their hope was for complete voluntary acceptance by the industries concerned, to avoid the necessity for the use of other measures on the part of the Price Administrator. Opinions expressed by representatives of both industries were to the effect that the action was both reasonable and necessary.

Testor Chemical Co. is the new corporate name of the Testor Cement Co. changed recently to make the company's name reflect the broadening scope of its present productive capacities and research facilities now covering a complete line of adhesives, lacquers, enamels, cements, etc.

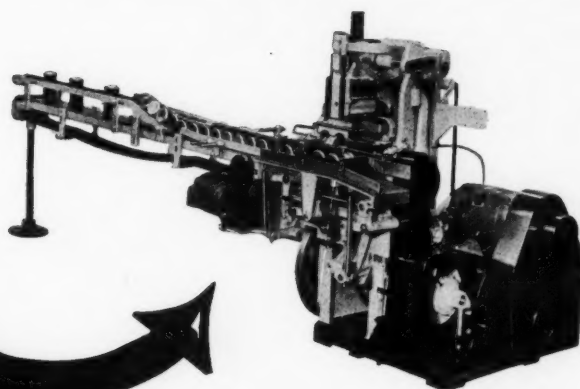
OBITUARY

Charles D. Henriques, for many years a leading salesman of the National Can Corp. and who had an active part in the modernization of can manufacture and supplying the army with ration cans during the first World War, died at his home in January.

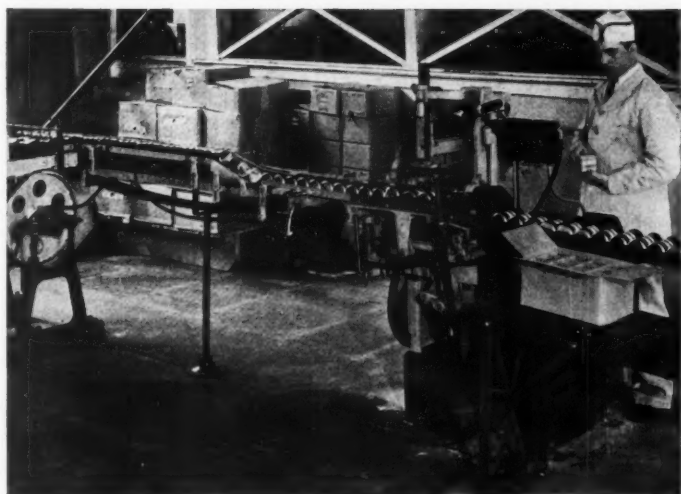
Cranberry Canners [ONSET PLANT]

Labeling

2-at-a-Time
120 per
minute!



on a Fully Automatic LABELRITE



- Perfect register
- Over-all glueing
- No wiping of bottles
- Petty cash change parts

... These are four of the features which have made *all* LABELRITES so outstanding in every-day performance.

More than 850 Labelrites are now installed in plants which modernized their equipment—and saved money—by replacing obsolete units with easily operated Labelrites.



Get FACTS—
and you'll get
LABELRITES!

Wherever glass containers are labeled, or other containers are labeled or sealed; wherever paper or foil is applied to paper, board, glass, or the product itself with an accent on appearance, and a desire for economy; Labelrites should be the chosen equipment. Painsstaking research and machine design created exclusive Labelrite features, and performance in many industries proves positive advantages!

NEW JERSEY MACHINE CORPORATION

1600 Willow Avenue ~ Hoboken, N. J.

CHICAGO OFFICE, 325 WEST HURON STREET

• Sales and Service Representatives in 12 Industrial Centres •

For Your Information

The new 1942 **Packaging Catalog**, issued by the Packaging Catalog Corp., 122 East 42nd Street, New York City, contains the answers to the multitude of packaging questions in the food industry, drug, tobacco, cosmetics, hardware, novelties, textiles and all the various fields where commercial packaging is a factor. There are 638 pages of documented facts on the subject of packaging and these pages are classified into 17 sections, comprising 128 separate articles, each written, edited and examined by an acknowledged expert on the particular subject. Six large, newly compiled charts provide immediately available information on all the important phases of packaging. The Catalog is a dependable encyclopedic treatment of types of packages, package parts and machinery and equipment as well as packaging materials and designs. The "Properties Chart of Wrapping Materials,"—classified by type, is entirely new and will prove a boon to thousands of packagers faced with the problem of finding a new type of material to do the job of a material which is no longer available. Other charts are: Package Design Checking Chart; Properties Chart of Plastic Sheeting Used for Rigid Containers; Properties Chart of Molded and Cast Plastics Used in Packaging; Properties and Use Chart of Adhesives; Labeling Difficulties Chart—Causes and Corrections. Each of the charts affords a convenient source of reference and information, which will be a valuable aid toward the solution of the many problems constantly arising in the field of packaging. The 17 sections of the Catalog are classified into: Design Principles; Packaging Law; Paper Containers; Wood, Leatherette and Pottery (compiled for the first time this year); Bags; Rigid Plastic Sheeting; Wrappings; Metal Containers; Glass Containers; Closures; Molded Plastics; Displays; Labels; Seals and Tags; Printing; Adhesives; Machinery and Supplies; Shipping; and a comprehensive Directory.

Years of planning on the part of forward-looking set-up box manufacturers have culminated in a far-reaching, cooperative promotional effort for this branch of the box-making industry with recent announcement of the go-ahead signal for the "Master Craftsmen" advertising campaign by this group.

The set-up box manufacturers now have their own organization with supporting membership and legally enforceable contract so that there is no question of its continuance. Activities will be carried on entirely separate of the National Paper Box Manufacturers' Assn. and are patterned after those of other trade organizations in other large competitive industries which have capitalized so successfully on the value of cooperative advertising and aggressive sales promotion.

Group action was definitely indicated in the spring of 1940, when an advertising committee for the set-up paper box makers was named by the National Assn. of Paper Box Manufacturers and a small fund provided for necessary expenses.

The committee has now organized a sufficient section of the industry, together with cooperating suppliers, to go ahead with the program. James G. Lamb Co. of Philadelphia has been appointed to handle the advertising and arrangements have already been made for space in *Modern Packaging*, *Fortune*, *Business Week*, *Modern Industry*, *Shears and American Box Maker*. Theme of the copy emphasizes today's packaging problems and each advertisement includes a list of the "Master Craftsmen" in each industrial area, together with cooperating suppliers. A "Master Craftsmen" trade symbol has been selected for use on stationery, promotional literature, trucks, etc.

Despite present conditions, it was decided to go ahead with the program immediately on the theory that those who are unable to use the product of the set-up box industry during the war period must not be allowed to forget its merits when the civilian market is again a buyers' market after victory.

The committee in charge consists of chairman, Walter P. Miller, Jr., president, Walter P. Miller Co., Inc., Philadelphia; Charles Allen, president, Sprowles and Allen, Inc., Philadelphia; Harold Fuller, president, Bicknell & Fuller, Boston. Charles Matthias, president, Matthias Paper Co., is also serving on the committee as representative of the Glazed and Fancy Paper Assn. whose members have supported the program substantially. George F. Davis, vice-president of the James G. Lamb Co., will act as account executive. W. Clement Moore is acting as treasurer.

The Market Research Co. of America, in digesting responses from 102 leading food producers to a questionnaire regarding war effects, makes the following report of their specific comments as related to packaging:

Nearly all the food producers expected that the effects of the war on packaging would be marked. A long list of items was mentioned as scarce for packaging purposes, including: tin, glass, plastics, coldpack equipment, aluminum, paper, cardboard, cellophane, board, ink, rubber, cork, etc. To meet these shortages, changes of three main types were discussed:

1. Simplification. Some representative remarks were:

"Probably a broad simplification of lines, reduction of fancy packages, reduction of visible packaging . . ."

"Less colorful labeling . . ."

"Some extra fancy frills will be eliminated . . ."

2. Standardization of sizes. Some interesting examples of this view are:

"Instead of having a great number of bottles for wine, jars for preserves, etc., these containers most probably will be produced in three or four sizes only."

"Larger shipping cartons to cut down carton and packing expense, and carton consumption; probably larger retail packages for the same reason."

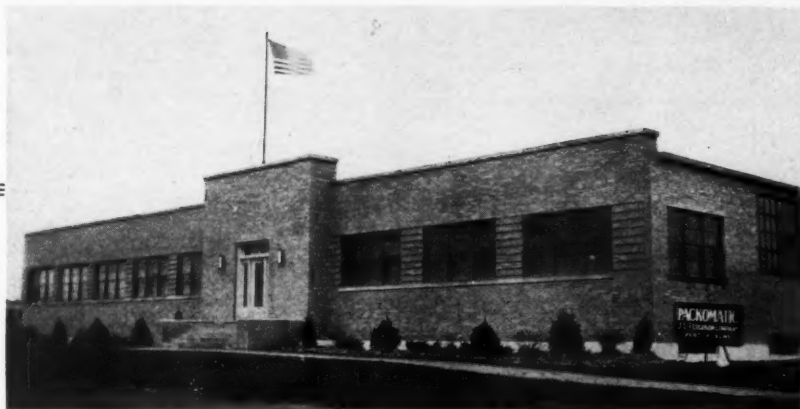
3. Decrease in the number of products packaged at all.

A typical statement refers to the possible reversion "to the old and long-forgotten custom of selling many staples in bulk."

There were, however, several statements of the idea that such simplification will take place without detriment to the protection of the foods, that preservation may in many cases be improved. Moreover, the limitation of the packaging problem to the food field as a whole was well put in the following statement:

"More than 50 per cent of the consumer's food dollar today, however, is tied up in the two categories of meat, poultry and fish—milk, butter, eggs and cheese, etc. Bakery products take another 9.2 percentage of the consumer's dollar. When we add another 14 per cent on strictly fresh vegetables and fruits (not in tins), we have left only about 25 per cent of the consumer's dollar that is actually in jeopardy from the hazards."

"The Seventh Production Yearbook" published by Colton Press, New York City, 1941. 468 pages, price \$5. Slightly larger and a good deal more impressive by reason of a lavish use of editorial 4-color printing in various processes, the Seventh Production Yearbook is the answer to a good many of the tangible problems in publishing and advertising. Contents are divided into seven headings: Art & Photography; Engravings & Duplicate Plates; Paper & Ink; Printing Processes; Binding, Mailing, etc.; Production Units; Typography. These are followed by a buyers' guide, index, etc. As usual, the book is replete with factual material which makes it a useful handbook for buyers and users of type, artwork and general printing. Contents are easily accessible and authoritative. The expanded study of Art Techniques, the Master Paper Selector, the Check-List for the production man, the Process Selector of the different color printing



HELP WIN THE WAR WITH INCREASED PRODUCTION THE **PACKOMATIC** WAY!

PACKOMATIC Engineers will help you with production problems, as they are now helping hundreds of manufacturers. With increased economical production we will all have more profits to divert to Defense Bonds and Stamps.

With our brand new daylight building, which was opened on December 7, the same day of the attack on Pearl Harbor, we are in better shape than ever to furnish **PACKOMATIC** Packaging Machinery to our many customers.

We are now working night and day on Defense work as well as meeting our customers' demands for production machinery.

A call by phone, or a letter or wire will bring one of our engineers without obligation, and all negotiation will be confidential.

SHIPPING CASE SEALING MACHINES

CARTON MAKING MACHINES

AUTOMATIC NET WEIGHT SCALES

CAN LABELING MACHINES

PAPER CAN SHRINKERS

AUGER PACKERS AND FILLERS

CONSECUTIVE NUMBERING DEVICES

CARTON SEALING MACHINES

AUTOMATIC VOLUMETRIC FILLERS

PAPER CAN TUBE GLUERS

PAPER CAN TUBE CUTTERS

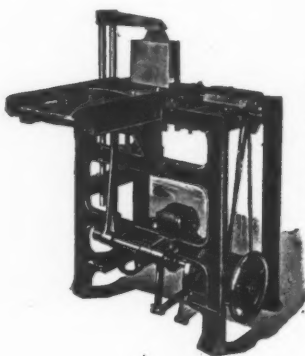
POCKET FILLERS—AND MANY OTHERS

PACKOMATIC
PACKAGING MACHINERY
J. L. FERGUSON COMPANY, JOLIET, ILLINOIS

BUY DEFENSE BONDS AND STAMPS

THE SOONER YOU START THE BETTER

To SET UP Your Cartons on Equipment

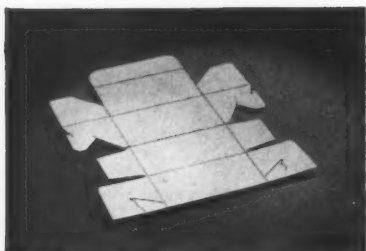


This PETERS JUNIOR CARTON FORMING AND LINING MACHINE sets up die cut "Peters Style" cartons at speeds up to 35-40 per minute, requiring one operator. After the cartons are set up, they drop onto the conveyor belt where they are carried to be filled. Can be made adjustable to handle several carton sizes.

To CLOSE Your Cartons on Equipment



This PETERS JUNIOR CARTON FOLDING AND CLOSING MACHINE automatically closes die cut "Peters Style" cartons at speeds up to 35-40 per minute, requiring no operator. The cartons enter machine on conveyor belt as open, filled cartons and leave machine completely closed. No operator required. Can be made adjustable to handle several carton sizes.



Type of die cut carton handled on above equipment

Send us a sample of each size carton you are interested in handling and we will promptly recommend machines to meet your specific requirements

PETERS MACHINERY COMPANY
GENERAL OFFICE AND FACTORY
4700 RAVENSWOOD AVENUE, CHICAGO, ILL.

processes—all are valuable features. The section on typography is organized as usual as a complete collection of all faces from various type foundries in a manner that makes comparative selection easy. Mechanical get-up and stimulating contents make it an interesting and useful volume.

"Valdura Paint Selector" is a handy chart, helpful in selecting appropriate paint for a given purpose without technical study. It is issued by the American Marietta Co. Free distribution.

Helpful display guide for spring and summer materials has been issued by Sherman Paper Products Corp. Contains practical ideas and information about useful materials.

General Electric Co., with the cooperation of Dr. Helen S. Mitchell, Director of Nutrition for Defense, has issued the booklet, "How to Get the Most Out of the Food You Buy," prepared for handy reference by the housewife.

"How Your Business Can Help Win the War" published by Simon & Schuster, New York City, 1941. 111 pages with supplement, edited by Hartley W. Barclay, with introduction by Donald M. Nelson. Price \$1. Businessmen whose normal activities have been curtailed or suspended will welcome this book, which is a practical guide book showing what the government wants to buy, how to bid, how to get contracts and sub-contracts for government orders, how to save time and money and cut red tape in contacting government offices. Particularly and specifically valuable is a 14-page list—four columns to the page—of items comprising what to make to get government orders. Accurate and businesslike instructions cover such orders. Accurate and businesslike instructions cover such points as how to get a blanket priority rating, getting orders and contracts of different kinds from the Army and Navy and the U. S. Treasury. In addition are complete and detailed lists of what and how various departments buy. Final section includes explanation of how small plants work in a defense production pool. Supplement presents in chart form details about priorities, allocations and prices. The 111 pages of the book plus the 20-page supplement contain in remarkably clear and usable form information that should be of great value to business concerns faced with the problem of adjustment to emergency conditions.

Services performed by The Toilet Goods Assn. for its members include (1) a materials exchange bureau functioning to exchange scarce materials among toiletry manufacturers, (2) plant census activity by which the industry makes a survey of its facilities, should the government need them with a view to determining what products may be manufactured and what workers may be available.

Winning packages in the "5 & 10" Packaging Contest sponsored by the Syndicate Store Merchandiser will be exhibited at a special display at the Hotel Astor, New York, April 14-17, during the Annual American Management Assn.'s Packaging Exposition.

Before the National Paper Trades Assn. at the Waldorf Astoria, New York, February 16, N. A. McKenna, OPA's chief of paper and pulp stressed desirability of avoiding priorities and retaining self government in business in the following words: "Do things yourselves. Every time you ask the government to do something which you can and ought to do yourselves, you give up just a bit of your autonomy."

Correction: In the Display Gallery, February Modern Packaging, we omitted mention that there is a patent pending on the Bottle Statuette, invented by Frederick Seid. An example of this device which utilizes the bottle of an advertiser's product to form part of a human figure, was illustrated as used in a display unit for John Wieland's beer. Similar devices have been made for tomato catsup, grape juice and other bottled products.



**SEEN!
SOLD!**

**FRESH AS THE
DAY THEY
WERE ROASTED!**

**FLAVOR
SEALED
IN!**

Protection — Attraction
The ideal package
widely used for food
products of many types.

LOW COST PACKAGE DOES BIG SALES JOB
for LANCE, INC., CHARLOTTE, N. CAROLINA
Makers of Fine Peanut Products

Show the product — and see sales soar! Seal-in its freshness and flavor — and see them come back to buy more!

Lance applies these success principles with one package that does *both* — and at low unit cost! It's the TRANSWRAP package, formed on the S & S TRANSWRAP machine.

Formed from printed "Cellophane," from the roll . . . heat-sealed, with a serrated cut-off . . . it makes a sparkling, transparent package, tightly sealed yet very easy to open.

Economical — the TRANSWRAP saves package material and labor. Fast — 60 or more complete packages per minute are



FORMED - FILLED - SEALED

ON THE

Product of the **STOKES & SMITH CO.**
Frankford Philadelphia, U. S. A.

S & S TRANSWRAP
A STOKES & SMITH MACHINE

Standardization—Individuality?

(Continued from page 36) of uniqueness or originality."

Murray Koff, The Fleischmann Distilling Corp.: "Steps have been taken to eliminate the necessity for individual tissue wraps on our Fleischmann's Gin bottles. This was accomplished by redesigning the bottle so that the label is recessed beneath two ribs, blown into the glass, which project above the bottle surface. The redesigned bottle also makes it possible for us to use the same size label on quarts, fifths and pints, eliminating the necessity for adjusting labeling equipment when changing from one size to the other on the bottling line. This change was made not only to obtain greater efficiency on the bottling line, but also to eliminate the necessity of using tissue wrappers, thus aiding in the conservation of paper. We feel that individuality in this instance has not been sacrificed."

A. P. Bondurant, Advertising Manager, Glenmore Distilleries Co.: "We, at Glenmore, have seen the handwriting on the wall, and for the past year have been putting our own house in order."

"Formerly, we had a wide variety of brands, labels, packages and closures. We have sharply curtailed and standardized. We are down now to one standard pint bottle, one standard half-pint, one standard fifth and two quarts. This second special quart package is not a tremendously large volume item, but it has been associated with this brand so long that we dare not change its unique appearance."

"As far as the labels are concerned, we have standardized the sizes all the way through the line and have reduced the paper square inch area of our labels by about 30 per cent."

"On closures, we have standardized so that we will need only two or three types, each of which can be used on certain brands. In other words, we have a white closure we can work on all brands that have white labels. We are working now to try to get a second general type closure that will work out satisfactorily with all labels other than white."

"In line with our efforts to standardize bottling, we have also been able to eliminate odd-size shipping containers. In addition, we have gone from a double container to a single corrugated case. Where formerly we used an inside and outside case as an added protection during shipment, we have been able to make a 40 per cent saving in boxboard by this move."

"It is our feeling that if we will be permitted to maintain our present limited number of labels in their present design and color scheme and the two different designs of closures, that we should be able to see this thing through from a packaging standpoint without losing the identity of our individual brands to any marked degree."

Wm. F. C. Brooker, Vice-President, Enoch Morgan's Sons Co.: "Standardization to some extent will kill individuality, but it will give an opportunity to place more emphasis on the brand name than on design. This may not coincide with the views of the package designer but, in view of the variety of designs of the numerous packages which are on display in stores, particularly in the grocery and drug field, no package today has much opportunity to stand out head and shoulders above the rest. We are making no plans to change the design of our packages as they are all very simple in design and we believe they serve the purpose for which they are needed."

Dennis F. Brown, President, Southland Coffee Co.: "Standardization will not kill individuality, but encourage it."

"One glance at the tremendous number of various sizes,

shapes and colors of jars, tins, cartons and other containers so confuses the normal minds of the average consumer that he despairs of the thought of shopping. Manufacturers in their anxiety to outdo their competitors often find themselves with 80 per cent of their packages representing only 20 per cent of their volume, and are often amazed at red figures after years of so-called scientific research in giving Mrs. Housewife exactly what they think she wants, or may be persuaded to buy."

"Standardization will make for economy in manufacturing, warehousing, advertising, sales and distribution, not to mention the elimination of unnecessary headaches all along the line—including those of the jobber, retailer and consumer."

"Standardization will mean increased effort on the part of artists and designer, since the attractiveness of the label will assist more than ever in the initial sale."

"Standardization will present untold opportunities for the manufacturer through multiple products instead of multiple packages, to individualize each product, attractively designed in one package."

"Standardization will be a godsend to the small merchant, the corner drug store, the neighborhood grocer who can on the same amount of inventory stock a multiplicity of items and products rather than conglomeration of packages representing fewer brands or products; simplicity will be substituted for confusion. Once again the medicine chest, the pantry, yea even Fibber McGee's closet will become orderly and inviting."

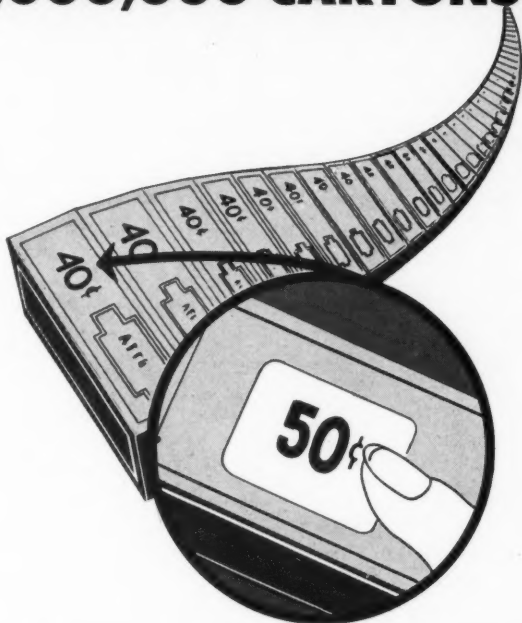
"We standardized our coffee packages and brands years ago. We had 3-oz., 4-oz., 8-oz., 12-oz., 1-lb. and 3-lb. sizes in bags, slip-cover cans, vacuum cans and vacuum jars. We discovered the 82-20 ratio, above mentioned, applied not only to our packages and brands, but to our customers as well. After getting the answer we acted—kicked out 70 per cent of our brands and packages and discontinued calling on 50 per cent of our customers. They represented only 10 per cent of our sales anyway. Our sales force was then given twice the territory with the same number of calls, all new prospects carefully chosen. The increased volume, along with economies affected, was amazing."

"Ours is a small firm working only the State of Georgia and parts of adjoining states. We think it is carefully managed. We know it is ace high with the trade and covetously successful. Standardization has increased the individuality of everything connected with our operations. We believe the cleaning of house through necessity caused by priorities, restrictions and shortages will prove the salvation rather than destruction of our factories, warehouses and organizations. And out of the chaos will rise a new Samson for each firm that has faith. We shall all then liken the present catastrophe to the old Samson who, you remember, killed more at his death than he slew during his life—if we are smart enough to remain standardized after the emergency."

"Those of us who are fortunate enough to live through these troublesome times will see changes the like of which we have never dreamed and with a rapidity unconceived. Standardization will never kill individuality, but powerful trivialities, mainly caused by a million unnecessary sizes, shapes and colors, have tried men's souls to the breaking point. When we eliminate them for standardization and specialization, heart trouble will cease to be among our number one public enemies."

A. E. Marshall, President, Rumford Chemical Works: "When it comes to the point of discussing plans we have made for the avoidance of loss of individuality of our pack-

HOW KUM KLEEN STICKERS SAVED 1,000,000 CARTONS



RE-PRICE OLD CONTAINERS

Use this magic sticker that even adheres to lacquered surfaces

A soap company changes a price, a food packer an ingredient, a cosmetic firm a shade—all met their packaging problem by covering obsolete information on old cartons with these amazing new Kum Kleen stickers.

Inexpensive Kum Kleen stickers were selected because they are quickly applied—stick without moistening—adhere to any smooth surface (even lacquered cartons, cellophane, glass and plastics) and stay on permanently regardless of climatic changes.

Where a removable sticker is needed, Kum Kleen peels off easily in one piece, without scraping and never leaves a mark.

These new stickers are available in assorted sizes, shapes and colors, printed or blank.

Write today for the complete story of Avery Kum Kleen stickers and labels. Send for samples and an interesting, informative catalog which relates case histories of other wide-awake manufacturers who have saved and profited by turning to Kum Kleen.



LUSTEROID

Saves



**WADDING
PACKING
WEIGHT**

Saving on wadding, packing, filling—and on the weight of the carton and the shipment—is a contribution to the war effort of no small value. For it is just in these types of paper and board, in the means of transportation, that some of our most difficult bottle-necks lie.

Use of Lusteroid rigid cellulose containers allows elimination of most wadding and filling, cuts down shipping weight of both filled and unfilled packages substantially. Lusteroid needs less protection than less sturdy packages because it is practically unbreakable—and at the same time of exceedingly light weight, weighing only about $\frac{1}{5}$ as much as an equivalent glass package. Lusteroid containers have many other advantages, as well.

A note or phone call will bring an answer to your packaging problem.

LUSTEROID CONTAINER CO. Inc.

Formerly Lusteroid Division of the Sillocks-Miller Company

10 Parker Avenue, West • South Orange, New Jersey

ages, I have to confess that while we have studied this problem for many months, in view of our guess that packages would have to be changed and simplified, we are not at all sure that our planned changes can be made because we think there are material shortages coming along which will make it impossible to put our plans into operation.

"Baking powder was one of the materials affected by the recent tinplate conservation order. We had changed one group of packages from all tinplate to fiber bodies with tinplate ends a good many months ago and, in the case of this package, substituting enameled iron for the tinplate in the ends is not going to be a serious matter.

"Another group of our packages are currently lithographed tinplate and these we can convert to lithographed black iron without apparent change in appearance, except, of course, long storage may bring about some cap and base rusting which has been absent in the lithographed tinplate cans. We have taken steps to convert the lithographed cans over to fibre bodies with metal ends, again without such great change in appearance that package recognition will be lost.

"These things which I have just recited are the sort of changes every manufacturer of a packaged product should have thought out for himself months ago, so they certainly do not constitute any novel approach to the problem.

"We had planned on some entirely different kinds of packages in the event metal ends went out of the picture, but some threatening shortages of other materials, such as I referred to, left us with the idea that we had better make a new start on still other forms of package, in this case concentrating our efforts on package construction materials which are not likely to be affected by war demands. The steps we have taken leave us with new packages resembling the old in all respects except the materials of construction."

J. A. Porter, Vice-President, Valley City Milling Co.: "I think the answer to the question is—the emergency brings us all together. Competition, like necessity, has been the mother of invention all through the past years when we have seen such a stupendous growth in the art of packaging. If the frills of packaging are removed for all, there can be no hardship on one and as it must be the case, we can see no particular hardship.

"Individuality cannot be killed by standardization. For example, men's clothing, with few exceptions, is standardized but to put it in terms of merchandizing, the personality of the product still shows through. The same could be said of women's hats. It really seems to us in this connection, that it is not so much what the hat itself looks like as it is how it is worn, which in itself reflects the individuality of the person of its personality. Trade marks and trade names are the individuality or personality of any product outside the package. The material inside the package is the real character."

O. B. Lyon, Advertising Manager, Weco Products Co.: "The question is one that should bring a lot of interesting opinions. If, however, standardization refers only to package sizes I do not believe that it will hurt any of us. There is still an untapped reservoir of creative ability in the creators and designers of packages today to make packages individualized and effective.

"Everyone is striving to make something and display it in such a way that no one else can copy it, so that his product alone will be purchased, when a re-purchase is necessary, and while this is as it should be, certainly there should be a standardization of packages so that the retailer can handle and display the merchandise in the most effective and satisfactory manner.

"A case in point, some years back, is the standardization of light sockets and electrical outlets. At one time there were approximately 300 different types of sockets and outlets and, during that particular time, it was necessary to purchase the lamp manufactured by the particular organization that made the socket or outlet. This eliminated, of course, competition because of patents, but, when the patents expired, the electrical field as a whole agreed to standardization. Now all the lamp bases, sockets and outlets are practically uniform and it is a simple matter to make a purchase and have it usable for the need intended. This is merely an illustration, but standardization in this field did not kill the individuality of the product or the merchandising ingenuity behind the product.

"Of course, temporarily the frills of packaging will disappear and packaging will have to survive through the ingenuity of design. Adaptability of colors should not be given too much consideration, because it may be that we will lose so many of the pigments in the rainbow of colors that we will be unable to make a colorful package. Therefore, the individuality of design is the thing that all must strive for. After the emergency is over, there will be a continuation of the remarkable advances that have been made in present-day design and modern packaging."

Conversion—Conservation

(Continued from page 42) authorize all uses of this metal, which are now restricted exclusively for steel alloys. Packagers are planning to reduce or eliminate yellows because of shortage of this pigment ingredient.

Cobalt blue, under order issued February 7, is prohibited for use as a pigment in any form for ceramics, glass, enamel ware, inks, paints, stains and pottery, except where blue glass is necessary for safety or optical properties. Order takes effect May 1, until which time use of cobalt is restricted to 40 per cent of the amount used in the first six months of 1941.

Glass carries the load

The glass industry continues to carry a peak load with fortunately so far no limitations on the raw materials. A threat of shortage appeared in connection with soda ash, but latest information is that the industry will obtain all of this material needed, despite extraordinary consumption for aluminum production.

The burlap order has been slightly relaxed for the benefit of furniture and textile plants, but its use in packaging remains under restriction. The Office of the Quartermaster General announces that burlap will henceforth be eliminated as a packaging material for all meat bought in the future for domestic and overseas Army consumption. The Quartermaster Corps has been studying substitute materials. Commercial packers are urged to ship meat for domestic consumption to the Army without packaging wherever possible, otherwise paper is the material specified. For overseas shipments, the inner wrapper of packaged meat is now made of crinkled paper, or stockinette, while the outer wrapper is of tightly sewed unsized muslin.

The War Production Board and the Defense Supplies Corp. are planning to buy up to 200,000,000 yards of the cotton fabric osnaburg which will be used for food bags and packaging as well as camouflage and sand bags.



A WAR MESSAGE to ALL EMPLOYERS

★ From the United States Treasury Department ★

WINNING THIS WAR is going to take the mightiest effort America has ever made—in men, in materials, and in money! Every dollar, every dime that is not urgently needed for the civilian necessities of food, clothing, and shelter, must, if we are to secure final Victory, be put into the war effort.

An important part of the billions required to produce the planes, tanks, ships, and guns our Army and Navy need must come from the sale of Defense Bonds. Only by regular, week by week, pay-day by pay-day investment of the American people can this be done.

This is the American way to win. This is the way to preserve our democratic way of life.

Facing these facts, your Government needs, urgently, your cooperation with your employees in *immediately* enrolling them in a

PAY-ROLL SAVINGS PLAN

The Pay-Roll Savings Plan is simple and efficient. It provides, simply, for regular purchases by your employees of United States Defense Bonds through systematic—yet voluntary—pay-roll allotments. All you do is hold the total funds collected from these pay-roll allotments in a separate account and deliver a Defense Bond to the employee each time his allotments accumulate to an amount sufficient to purchase a Bond.

The Pay-Roll Savings Plan has the approval of the American Federation of Labor, the Congress for Industrial Organization, and the Railroad Brotherhoods. It is now in effect in several thousand companies varying in number of employees from 3 to over 10,000.

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This space is a contribution to National Defense by Modern Packaging at the request of the Treasury Department.

Canners face grim year

(Continued from page 62) Rumors were current that the government had opened priority doors wide to manufacturers of dehydrated foods in order to stimulate increased production for Lend-Lease and military consumption, particularly because of obvious convenience of food in this form for shipment and storage overseas. Modern Packaging has investigated this situation and learned that these rumors were hardly accurate. The facts are these:

A group of processors of dehydrated foods met with government representatives in Chicago, January 28. They were told to increase their output with all possible speed, but not to expect any more consideration in connection with priorities than any other food producers. They were admonished not to let up in their efforts to improve their quality, retention of vitamin content, flavor, etc. It was apparent that there is not as yet complete unity of opinion as to processes even among government technologists and some of the government authorities feel that further progress can be attained in matters of quality.

At the Chicago meeting of these dehydration processors, an organization was set up to be known as the National Dehydrators Assn. Lawrence K. Harper, Sardik Food Products Corp., was named president, with Joseph B. Pardieck of California Vegetable Concentrates, as vice-president. Members, who are located in various parts of the United States, have heretofore been cooperating in an unorganized manner; now they feel that more definite technical and commercial progress can be made. Immediate concerns are the filling of government orders for quantities of the six principal vegetables (which, in the order of their importance, are: potatoes, onions, tomatoes, cabbage, carrots and beets) and furnishing ingredients to packagers of such products as dehydrated soups, etc., but deferring aggressive commercial expansion for domestic civilian consumption until after the war.

The canning industry's job in the days ahead was brought home forcibly in an address by Roy F. Hendrickson, Administrator, Agricultural Marketing Administration, U. S. Department of Agriculture.

"We need a tremendous increase—a new record—in most canned food production this year," he said. . . . "Canned food won its first great recognition in wartime—during the war between the States. Since then its production quantitatively and qualitatively has been multiplied many times. It will play a more important role in this than in any previous war—and in post-war feeding, it will be depended on to serve as the first token of peace to millions who are now or soon will be broken and hungry.

"Farmers and canners, and all of us, have had easy-going so far compared with what is certain to be ahead of us in the next several years. Sometimes the going will be very tough. You can count on cooperation, close cooperation, from the units of the Agricultural Marketing Administration and other agencies of the Department of Agriculture.

"Up to December 1 we turned over to the British more than 2,650,000,000 pounds of agricultural commodities, mostly concentrated food. These shipments would fill a solid train of freight cars 550 miles long. The most important limiting factor on this movement is ocean shipping space, but improvement on this score is in sight.

"The list of items we have been and are buying for Lend-Lease purposes is quite a lengthy one and practically all of the products are processed in some form or other. Moreover, canned foods have contributed an extremely important part

of this list, amounting to nearly half of the total in terms of pounds. Evaporated milk, canned pork, fish, tomatoes, pork and beans and fruit are among the most outstanding canned food items we have been shipping to the British.

"Purchases of food for Red Cross needs really have just started. To date, about 69,000,000 pounds have been bought. Flour and evaporated milk have been the principal items purchased thus far.

"Almost immediately after the attack on Hawaii, the Agricultural Marketing Administration began developing plans for the feeding of this important outpost of our country. A revolving fund of \$35,000,000 was provided us by Congress with which to do the job. Our other off-shore territories and possessions will require the same consideration and \$15,000,000 for that purpose has been supplied.

"More recently, we have been negotiating with representatives of the Russian government concerning the problem of providing needed food supplies.

"The year ahead calls for full production—we have the job to do right now, in 1942. Agriculture and related industries cannot afford to forego taking advantage of every opportunity to produce the maximum possible of the most needed foods. The bug-a-boo of reserve supplies must be put aside. I'm confident that we'll be most grateful for every pound of food reserves we can store up from the 1942 harvests."

Officers elected to the National Canners Assn. at the convention were as follows: President, Carroll E. Lindsey, Lakeland Highland Canning Co., Highland City, Fla.; First Vice-President, G. Sherwin Haxton, Haxton Canning Co., Inc., Oakland, N. Y.; Second Vice-President, Alfred W. Eames, California Packing Corp., San Francisco, Calif.; Secretary-Treasurer, Frank E. Gorrell, Washington, D. C.

Units that made best records

(Continued from page 72) of Yankee and Blackstone cigars, found that their silk banner in patriotic colors was particularly successful during the past year. This banner, though only about 12 in. by 18 in., plays up their slogan, "You Can't Beat a Yankee," in an effective manner.

(22) Not often does a display piece get a break in a men's furnishing store. But the utterly ridiculous character of two Munsingwear cards assured them a place in numerous haberdasheries. In a fashion which produced chuckles as a by-product, they tell the story of Munsingwear's variety of styles in men's underwear, as well as the variety of masculine figures which the underwear is designed to fit.

Each observer, analyzing these displays, will be able to draw conclusions of his own. It should be remembered that none of the pieces illustrated was selected for its beauty, but because of its service record of sales. Naturally, the important question in each case is, "What makes it sell?"

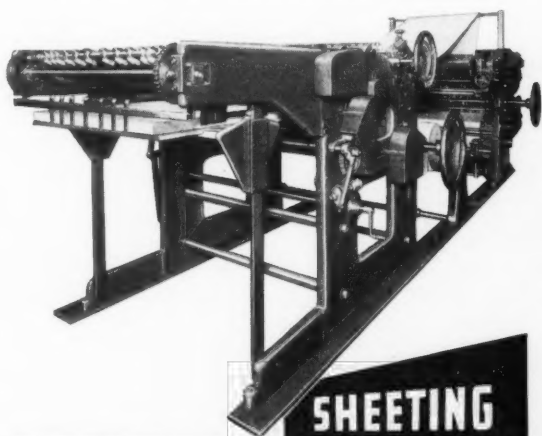
The answers may lead in many directions. In at least one case, alertness in taking advantage of a particular position or situation is the clue. In other cases, ingenuity of construction may be the explanation. In other instances, it may be necessary to go behind the scenes to learn the reasons. For instance, perhaps the advertiser has an exceedingly thorough plan for merchandising his displays to and through his own sales force and his dealer organization. A price advantage or a "deal" of interest to both retailer and consumer may explain some successes.

As a general thing, it may be concluded that window and store display as a medium does not need to shrink from scrutiny as to its pulling power and sales-making ability.

PACKAGING PROBLEMS

R

If there is a solution—existing or potential—for your packaging, packing and shipping problems, you'll find it at the American Management Association's twelfth annual Packaging Exposition and Conference, Hotel Astor, New York, April 14 to 17.



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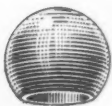
will release hands for other work, because thru its great simplicity, it needs very little of the operators' attention, once it is set. Especially when equipped with **ELECTRIC EYE CONTROL** are you freed from human element in your sheeting work. Amazing degrees of accuracy in "spot sheeting" work, plus profitably increased outputs. The need for doing your own sheeting is probably more acute now than ever before in your business history, and this because of present conditions.

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LET us quote you on your requirements. Hundreds of dies and molds available for Essential Oil Cans, Sprinkler Tops, Screw Caps, Aluminum Capped Corks, Lead and Tin Coated Spouts, Metal Specialties. 80 years' experience in meeting the needs of packagers. Call upon us for aid.

CONSOLIDATED FRUIT JAR COMPANY
NEW BRUNSWICK • NEW JERSEY

Standardize to save

(Continued from page 58) will form the basis for a revised recommendation on sizes. It was the general opinion of those at the meetings that the line with its eleven sizes is adequate under present conditions and that, while the drastic size restrictions now recommended may not be accomplished, considerable simplification of sizes is both feasible and desirable.

Reports from manufacturers

In its own check-up on the sentiment with regard to this standardization program, Modern Packaging asked a number of manufacturers who would be affected by this measure to give their opinions. Few cared to be quoted by name, but had no hesitancy in expressing themselves. Interesting comments:

From a condiment manufacturer: "We are wondering whether it is the intention of the government to make the adoption of this style mandatory. Our jars come within these size ranges, but are so designed that they are really more economical of material than the newly standardized jars. Our quantities are so great, too, that the production cost is at a minimum. We do think, however, that the movement is in the right direction and should be an excellent thing for the smaller user. For us, it would work a hardship to change over, and we frankly hope it will not be compulsory."

From a manufacturer of preserves and jellies: "We have been anticipating such a move and have been standardizing on our own hook, so we've beaten them to the punch—we're prepared for this development."

From a general line packer: "We pack only one product in glass and could probably change over to this style without much trouble or expense; though we'd prefer re-use containers if possible to obtain them."

From a food products house: "We haven't had an opportunity yet to study all the implications of this plan, but we are inclined to think we would welcome such standardization."

Coffee in glass


From the producer of a nationally distributed general line of foods: "We have been packing coffee for quite a few years in glass in one of our plants, and within the last year or so have expanded these facilities to other plants. We are using a standard coffee jar developed for us by a glass manufacturer. This jar is 12 oz. in weight, and it uses a 63-mm. screw cap. The jar is round and has very wide curves at the bottom and top. The previous coffee jars were made at about 23 oz. in weight and used a 70-mm. deep cap. Many of these older jars had flat panels and a small radius of curvature at bottom and shoulder. The newer jars, besides making a great saving in weight, are much tougher because of better annealing and stronger because of the engineering principles utilized in using wide arcs in place of flat panels and abrupt bends. The newer jars will run at higher speeds on automatic equipment and are much easier to label and give less breakage in transit. Needless to say, we are all for standardization of this type, and both the Glass Container Assn. and the Bureau of Standards are very wise in pushing standardization of glass containers. After all, there is only one diameter to the vacuum coffee cans on the market and but very little variation in the heights of the containers."

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Take time out for a visit to The Chelsea, Atlantic City's distinctive beachfront hotel. You'll find diversion, good-living, and good company—outside ocean-view rooms, sun decks, a beautiful dining room at the water's edge, superb French cuisine, sports, entertainment, game room, magnificent Bar.

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CLASSIFIED

WANTED: Salesman with engineering training and knowledge of the drug and cosmetic trades. Territory State of New York and surrounding areas. Apply Box 150, Modern Packaging.

WANTED: Rotogravure Salesman to sell Rotogravure Process, printing plant equipped to print 2 colors, one side, in rolls or sheets. Apply Box 151, Modern Packaging.

WANTED: Representatives to handle cellophane bag making machine. All territories. Write Modern Containers, Inc., 815 S. Hill St., Los Angeles, California.

LAMINATOR WANTED: A used laminating machine which will take webs up to 36" wide for experimental purposes. Must be cheap. Address Standard Process Corporation, 734 W. Lexington St., Chicago, Ill.

TWO-COLOR MIEHLE FOR SALE: One /0 Two-color Miehle in good condition, size 38 x 56, with Cross feeder, fully equipped, can be seen in operation, used for fine process work, reasonable. Address Box 152, Modern Packaging.

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Union Paste Company

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INDEX OF ADVERTISERS

Aluminum Co. of America.....	26	Kimble Glass Co.	10
Aluminum Seal Co.	12	Richard M. Krause, Inc.	29
American Can Co. Inside Front Cover			
Anchor Hocking Glass Corp.	5		
Avery Adhesives.....	95	Lowe Paper Co.	66
		Lusteroid Container Co., Inc.	95
Chas. Beck Machine Co.	100		
Bostitch, Inc.	73	Master Craftsmen of Set-Up Paper Box Industry	4
F. N. Burt Co., Inc.	53	Mundet Cork Corp.	6
Carr-Lowrey Glass Co.	23	Nashua Gummed & Coated Paper Co.	30
Celanese Celluloid Corp.	19	National Adhesives Div. of Nat'l Starch Products, Inc.	87
Chelsea Hotel.....	101	National Can Corp.	24-25
Classified.	101	National Paper Box Mfrs. Assn.	4
Consolidated Fruit Jar Co.	100	New Jersey Machine Corp.	89
Continental Can Co.	9		
Crown Can Co.	59	Owens-Illinois Glass Co.	54-55
Crown Cork & Seal Co.	65		
Crystal Manufacturing Co.	99	Package Machinery Co.	76
		Packaging Catalog.....	28
Dow Chemical Co.	61	Packaging Exposition.....	99
E. I. du Pont de Nemours & Co., Inc., Cellophane Div.	7	Peters Machinery Co.	92
E. I. du Pont de Nemours & Co., Inc., Cel-O-Seal Section.....	14	Phoenix Metal Cap Co.	1
Durez Plastics & Chemicals, Inc. Inside Back Cover		Pneumatic Scale Corp., Ltd.	85
J. L. Ferguson Co.	91	F. B. Redington Co.	3
Fitchburg Paper Co.	18	Rhineland Paper Co.	57
Forbes Lithograph Co.	11	Riegel Paper Corp.	13
The Gardner-Richardson Co.	20-21	Shellmar Products Co. Back Cover	
		Stokes & Smith Co.	93
Hampden Glazed Paper & Card Co. Insert 4-5		Sutherland Paper Co.	8
Harris-Seybold-Potter Co.	83	Swindell Bros.	27
Heekin Can Co.	63		
Hinde & Dauch Paper Co.	17	Union Paste Co.	101
Hudson-Sharp Machine Co.	99		
Humitube Manufacturing Co.	101	Warner Brothers Co.	15

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